StopPalu
President's Malaria Initiative (PMI) Program Component

FY 2016 Annual Report

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RTI INTERNATIONAL

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FY 2016 Annual Report

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Abbreviations

ACT	artemisinin-based combination therapy
AMP	Alliance for Malaria Prevention
ANC	antenatal care
AOR	Agreement Officer's Representative
APIC	*Association pour la Promotion des Initiatives Communautaires*
ASAQ	artesunate-amoadiquine
ASM	American Society for Microbiology
BCC	behavior change communication
CAM	*Club des Amis du Monde*
CBO	community-based organization
CCoP	Communication Community of Practice (RBM)
CDC	US Centers for Disease Control and Prevention
CENAFOD	*Centre Africain de Formation pour le Développement*
CHW	community health worker
CJMAD	*Comité des Jeunes Mon Avenir D'abord*
CMC	communal medical center
CREC	*Centre de Recherche Entomologique de Cotonou* (Entomological Research Center of Cotonou)
CRS	Catholic Relief Services
CSH	*Comité de Santé et d'Hygiène* (Health and Hygiene Committee)
DCS	*Direction Communale de la Santé* (Communal Health Directorate)
DHS2	Demographic and Health Survey 2
DPS	*Direction Préfectorale de la Santé* (Prefectural Health Directorate)
DRS	*Direction Régionale de la Santé* (Regional Health Directorate)
EPI	Expanded Program of Immunization
FY	fiscal year
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
IEC	information, education, and communication
IMNCI	Integrated Management of Newborn and Childhood Illnesses program
INAASPO	*Initiatives et Actions pour l'Amélioration de la Santé des Populations*
IPC	interpersonal communication
IPTp	intermittent preventive treatment of malaria in pregnancy
KAP	knowledge, attitudes, and practices
LLIN	long-lasting insecticide-treated net
M&E	monitoring and evaluation
MOH	Ministry of Health
MOP	Malaria Operational Plan
NCC	National Coordination Committee
NGO	nongovernmental organization
NIPH	National Institute of Public Health
NMCP	National Malaria Control Program
NMS	National Malaria Strategy

NPHL	National Public Health Laboratory
NSP	National Strategic Plan
NTD	neglected tropical diseases
OMVS	Senegal River Basin Development Organization (*Organisation pour la mise en valeur du fleuve Sénégal*)
PCG	*Pharmacie Centrale de Guinée* (Central Pharmacy of Guinea)
PMI	President's Malaria Initiative
QA/QC	quality assurance/quality control
RBM	Roll Back Malaria
RDT	rapid diagnostic test
SBCC	social and behavior change communication
SBM-R	standards-based management–recognition
SIAPS	Systems for Improved Access to Pharmaceuticals and Services project
SNIS	National Health Information System (*Système National de l'Information de la Santé*)
SP	sulfadoxine/pyrimethamine
TOT	training of trainers
TWG	technical working group
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

1 Executive Summary

The President's Malaria Initiative (PMI) Program Component (*StopPalu*) is a four-year project (originally running from May 2013 through September 2016; recently extended to September 2017) with the goal of assisting the Government of Guinea to achieve the PMI target of reducing malaria morbidity and mortality through multiple interventions in prevention, diagnosis and treatment, and capacity building of the Ministry of Health (MOH) and the National Malaria Control Program (NMCP). *StopPalu* covers 14 districts and the five communes of Conakry in Guinea. RTI International is implementing *StopPalu*, supported by sub-partners Jhpiego, the American Society for Microbiology (ASM), and *Centre Africain de Formation pour le Développement* (CENAFOD).

Malaria is the leading communicable disease in Guinea. Although all of the country's 10.9 million people live in areas at risk of malaria, the country can be divided into four main areas of differing malaria endemicity (***Figure 1***).

During the period covered by this annual report (October 1, 2015, to September 30, 2016), the project activities focused mainly on organizing the long-lasting insecticide-treated net (LLIN) mass distribution campaign, coordinated by NMCP, in the project's geographical area. To increase uptake of intermittent preventive treatment of malaria in pregnancy (IPTp), *StopPalu* supported the NMCP in training 453 new antenatal care (ANC) staff on the revised training manual on focused prenatal care that includes the National Malaria Strategy (NMS) and the most recent World Health Organization (WHO) recommendations related to malaria in pregnancy. To improve malaria case management services at both health facilities and community levels, the project trained new health providers and community health workers (CHWs) on malaria prevention and treatment protocols. The project also trained lab technicians on malaria diagnosis including rapid diagnostic test (RDT) and microscopy use.

The project increased supervision activities with the Prefectural Health Directorates (*Directions Préfectorales de la Santé* [DPSs]), the Communal Health Directorates (*Directions Communales de la Santé* [DCSs]), and the Regional Health Directorates (*Directions Régionales de la Santé* [DRSs]). These supervision sessions encouraged CHWs and health facility staff to adhere to protocols for malaria case management, especially to test all suspected malaria cases prior to prescription of anti-malarial treatment. During these supervisory visits, health agents were given onsite training or selected for future refresher training, depending on the individual's skills and knowledge observed by the supervisors.

To improve data collection at the health facility level, *StopPalu*, through its nongovernmental organization (NGO) partners, continued to support the health centers to organize monthly monitoring meetings. To increase the quality of data analysis at the prefectural level and reduce errors, the project continued to support the 19 DPSs/DCSs to organize monthly meetings—with the participation of all heads of health centers—to review, discuss, correct, and analyze data.

As part of support to the NMCP capacity building plan, *StopPalu* continued to provide the NMCP office with Internet connection and renovated parts of the office building in Conakry. The project supported monthly meetings of the technical working groups (TWGs) and the national Roll Back Malaria (RBM) Committee. The project supported the NMCP to edit and disseminate 1,000 copies of the NMCP's annual newsletter (annual report), which includes the activities of all partners involved in malaria control in Guinea.

The main results of the reporting year are the following:

- In the 14 prefectures and the five communes of Conakry covered by the project, *StopPalu* supported the NMCP in design, development, planning, implementation, and supervision of the national LLIN mass distribution campaign:
  - Trained 838 regional, prefectural, and health center staff members and neighborhood leaders (*chefs de quartier*) on micro-planning.
  - Developed and validated 19 micro-plans (one for each prefecture and one for each commune).
  - Trained 723 trainers on households enumeration and social mobilization (533 regional, prefectural, and health center trainers in the 14 prefectures and 190 in Conakry).
  - Visited 1,079,889 households for enumeration and voucher distribution (726,363 households in the 14 prefectures and 353,526 households in Conakry).
  - Trained 706 health center trainers on LLIN distribution procedures in the 14 prefectures and the five communes of Conakry.
  - Trained 4,273 agents on LLIN distribution procedures for the campaign in the project coverage area.
  - Distributed 3,369,083 LLINs (2,342,254 LLINs in the 14 prefectures and 1,026,829 LLINs in the five communes of Conakry).
  - Broadcast 3,107 radio spots and 244 television spots on enumeration and distribution activities.
  - Organized 21 interactive radio programs and 16 roundtable discussions to promote campaign activities.
- Broadcast 2125 radio spots and 149 television spots on regular and correct net use.
- Broadcast 2,240 radio spots and 203 television spots on how to transform rectangular nets into circular ones.
- Broadcast 2467 radio spots and 251 television spots on artemisinin-based combination therapy (ACT) use at no cost.
- Broadcast 1,510 radio spots and 205 television spots on routine LLIN distribution.
- Produced 22 roundtables and 26 interactive radio programs on routine LLIN distribution.
- Trained 109 Health and Hygiene Committee (*Comité de Santé et d'Hygiène* [CSH]) members on health center management and advocacy techniques.
- Conducted refresher training for 20 national-level trainers for malaria diagnosis.
- Trained 21 new laboratory technicians in the regions of Boké and Kindia.
- Trained 61 lab technicians from Conakry on RDT use.
- Trained 453 new ANC staff on IPTp.
- Trained 231 new health providers in the regions of Boké and Labé.
- Conducted onsite training for 200 new health providers of five health facilities.
- Trained 27 heads of private health facilities on the use of malaria reporting forms.
- Supported the organization of 149 monthly monitoring meetings in the 14 DPSs and 5 DCSs of Conakry.
- Supported the NMCP's organization of the TWGs' meetings.

- Supported 14 DPSs supported by the project to conduct supervision visits for health facilities and CHWs to review malaria control activities.
- Reactivated the NMCP website.
- Trained 1281 CHWs on integrated management of newborn and childhood illnesses (IMNCI), using funding from the United Nations Children's Fund (UNICEF).

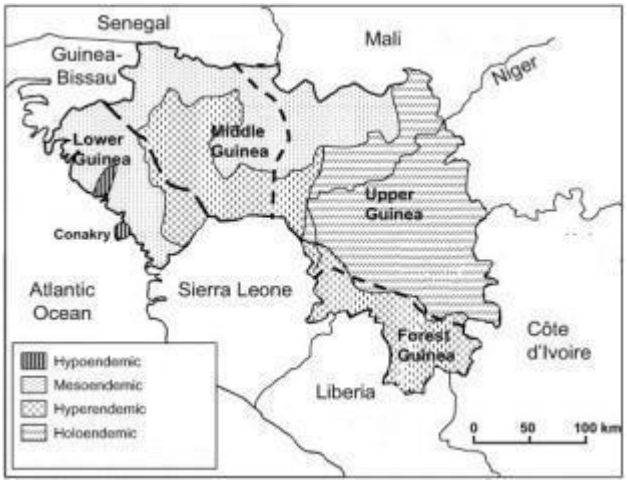
2 Introduction

2.1 Background

2.1.1 Malaria Context in Guinea

Malaria is the leading communicable disease in Guinea. Although all of the country's 10.9 million people live in areas at risk of malaria, the country can be divided into four main areas of differing malaria endemicity (Figure 1). The goal of the National Malaria Strategy (NMS) 2013–2017 is to reduce malaria morbidity and mortality by 50% by 2017. NMS implementation has benefited from two grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) in addition to funding from the President's Malaria Initiative (PMI).

Figure 1: Malaria endemicity in Guinea



2.2 Program Description

2.2.1 Project Goal and Objectives

The goal of the *StopPalu* project is to assist the Government of Guinea to achieve the PMI target of reducing malaria morbidity and mortality. Main objectives include the following:

1. Improving malaria prevention in support of the NMS
2. Improving diagnostic testing and malaria treatment capacity
3. Enhancing the National Malaria Control Program's (NMCP's) technical capacity to plan, design, manage, and coordinate a comprehensive malaria control program

For each result area, our operational strategy integrates and links the inputs, processes, and systems required for strong results.

2.2.2 Partners

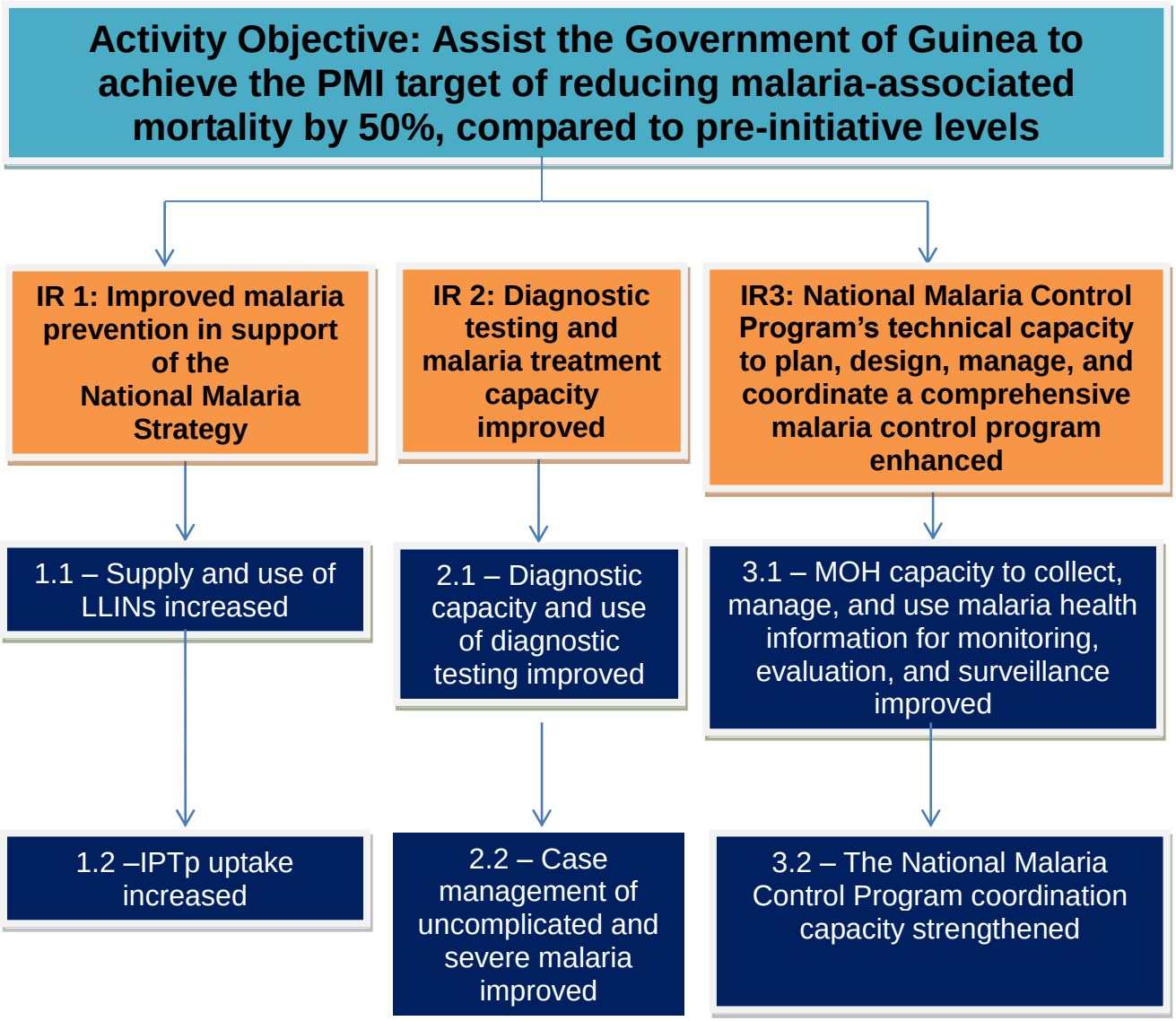
RTI partners for *StopPalu* include the following:

- **Jhpiego**: Jhpiego works to improve malaria outcomes and strengthen the quality of services at facility and community levels; it will continue and scale up under *StopPalu*.
- **The American Society for Microbiology (ASM)**: ASM provides *StopPalu* with evidence-based and context-appropriate approaches to consensus-based diagnostic training and capacity building, monitoring and evaluation (M&E) of laboratory practices and collaborative quality improvement, and country-owned solutions for enhanced performance.
- ***Centre Africain de Formation pour le Développement* (CENAFOD)**: CENAFOD supports the integration of governance aspects in *StopPalu* activities—from promoting better service provision, transparency, and accountability of government partners to helping civil society play its roles more effectively.
- Local partners include four Guinean nongovernmental organizations (NGOs) with demonstrated PMI program results in behavior change communication (BCC) and social mobilization: *Association pour la Promotion des Initiatives Communautaires* (APIC), *Club des Amis du Monde* (CAM), *Comité des Jeunes Mon Avenir D'abord* (CJMAD), and *Initiatives et Actions pour l'Amélioration de la Santé des Populations* (INAASPO).

2.2.3 StopPalu Results Framework

The main objectives of the project as well as the three main results are shown in Figure 2. The four following sections describe the activities carried out for each of these results and project management.

Figure 2: Results framework



3 Activities by Result

3.1 Result 1: Improved malaria prevention in support of the NMS

3.1.1 Sub-result 1.1: Supply and use of LLINs increased

- **General Objective**

For FY 2016, the activities under this sub-result focused on supporting the NMCP to organize the 2016 LLIN mass distribution campaign. To increase the supply and use of LLINs in accordance with the national policy and to maintain universal coverage of LLIN level the project continued to support the routine LLIN distribution strategy through antenatal care (ANC) and expanded program for immunizations (EPI) services in public and private health centers. The project also conducted communication activities to promote regular use and maintenance of LLINs and supervised routine LLIN distribution.

- **Specific Activities and Results**

Activity 1. Support the FY 2016 LLIN mass distribution campaign.

Activity 1.1.1.1 Support coordination activities at the central, regional, and prefectural levels, as well as support the national mass distribution coordination committee. During the first quarter of the reporting period, *StopPalu* supported the NMCP in the establishment of a National Coordination Committee (NCC) for the mass distribution as well as subcommittees on planning, logistics, BCC, and M&E. The NCC is composed of the MOH representative, NMCP staff, donors, and all national and international NGOs involved in malaria control activities in Guinea.

StopPalu supported the development of the terms of reference for the NCC and the subcommittees. On December 16–19, 2015, the project participated in a workshop organized by the NMCP in Kindia. Representatives of the MOH, NMCP, *StopPalu*, Catholic Relief Services (CRS), Plan International, ChildFund International, and the NCC participated in the workshop. With the support of two consultants from Alliance for Malaria Prevention (AMP), the participants were divided into four thematic groups: Planning, Logistics, Communication (BCC), and M&E. Each group developed an action plan with a Gantt chart of the activities, tools, and budget for specific activities. After returning to Conakry, during the last two weeks of December 2015, a team composed of NMCP, CRS, *StopPalu*, and PMI consolidated the different action plans and budgets to develop a total budget for the campaign and identify funding gaps. The final budget was approved by the NCC and submitted to the donors.

During the second quarter, *StopPalu*—through the NCC—worked with two international consultants to revise the training manuals on enumeration, social mobilization, and distribution. After the micro-planning activities (see Activity 1.1.1.5), the team revised the budget to include the population increase noted during the micro-planning, as compared with the data that were used for the budgeting process. (Please note that the NMCP used 2009 population census data along with a rate of annual increase to estimate the 2016 population.) To assess the quality of enumeration, the NCC worked with the US Centers for Disease Control and Prevention (CDC) team to develop a monitoring guide and the tools.

During the third quarter, *StopPalu* participated in the NCC's bi-weekly meetings. An important task of the NCC at that time was to develop and validate an agenda for the various campaign activities. This was not an easy task. For the 2016 distribution, the NCC decided to use a strategy that was recommended by AMP for the campaign in the entire country. The

main tenet of this strategy is to employ micro-planning (multi-level and decentralized planning to ensure that processes are suited to local contexts) before enumeration, and then to conduct the enumeration based on the micro-plan data. Please note that this approach was already used by the project during the 2013 LLIN distribution campaign. However, during that campaign, there were several issues concerning the procurement of nets—delays in ordering the nets and uncertainty of shipments' arrival times at the Conakry port. For the 2016 campaign, the NMCP wanted to organize the campaign in one or two phases. However, because of the previous issues with net procurement, the NCC finally decided to implement the 2016 campaign in three phases, as it was in 2013: phase 1 in the 19 prefectures supported by GFATM, phase 2 in the 14 prefectures covered by PMI (through *StopPalu*), and phase 3 in the five communes of Conakry (*StopPalu*).

To better coordinate campaign activities with other MOH programs, the NCC invited the EPI managers and Neglected Tropical Disease (NTD) Program team to attend some meetings. During these meetings, the schedules for various campaigns—vaccination, NTD mass drug administration, and LLIN distribution—were harmonized to avoid having several national campaigns being conducted at the same time. However, it should be noted that the EPI program has not always been able to adhere to the timetable that was approved during these meetings, which negatively impacted the LLIN campaign activities. For example, enumeration activities were postponed twice because of scheduling conflicts with EPI's vaccination campaign.

To conduct the campaign activities in both the 14 prefectures and the five communes of Conakry before the high rainy season, the project decided to implement the activities in this order: (1) conduct the enumeration first in the prefectures and then in Conakry, (2) conduct the distribution and the post-distribution visits in the prefectures, (3) conduct distribution and the post-distribution visits in Conakry. Conducting the activities in Conakry before the rainy season was quickly identified as a substantial challenge for the project. To address this issue, the regional project teams were requested to come and reinforce the project team in Conakry to support their activities.

The NCC meetings were also useful in revising the campaign budget—taking into account new activities such as the monitoring and the various trainings for logisticians. Because these meetings were so frequent, it was possible to closely monitor implementation of the campaign action plan, analyze the results of each activity performed, identify problems, and propose solutions—all in a timely manner.

During the enumeration, distribution, and post-distribution visits, data were sent to the NMCP on a daily basis and reviewed by all actors during the NCC meetings. The key benefit of this strategy is that it helped the NCC identify problems early and propose solutions. The weakness was that data sent daily often contained several mistakes because the field teams did not have sufficient time to review the data and make appropriate corrections before sending them. Therefore, data were sometimes sent back and forth multiple times before finally being accepted.

NCC meeting

Activity 1.1.1.2: With the NCC, review/develop management and data collection tools for the mass distribution campaign: On December 16–19, 2016, during the planning workshop in Kindia, the M&E subcommittee reviewed the data collection tools used during the 2013 campaign and made changes based on lessons learned from the previous campaign. During the third quarter, *StopPalu* supported the NMCP in producing copies and distributing these materials at all levels in the project-supported prefectures.

Activity 1.1.1.3 Develop, pre-test, and produce communication materials and support materials for all steps of the mass distribution campaign (enumeration and voucher distribution, LLIN distribution, and social mobilization). During the second quarter of FY 2016, and in line with the distribution campaign's national communication plan, the project produced many communications materials to promote the population's participation in enumeration activities and their use of the bed nets.

In collaboration with the NCC's sub-committee for BCC, *StopPalu* revised the key messages and updated the social mobilization guides to be used for all trainings. The project also produced 3,000 visual aids on essential actions for proper use and maintenance of nets, to be shown and discussed during household visits. To increase social mobilization, *StopPalu* produced radio spots to promote the enumeration and people' participation in the campaign activities. Some physical BCC materials—such as tee-shirts and caps, bags, and banners—with key messages and the campaign slogan were also produced. Each enumeration agent received two tee-shirts and one cap to wear during the 10 days of enumeration. For this campaign, the NMCP proposed the slogan "*Dormons tous sous moustiquaires"* ("Let's all sleep under nets") and a logo. The project also worked with a group of well-known Guinean musicians to produce a song to promote the correct and regular use of bed nets. These artists produced television and radio spots on bed-net utilization. The idea was to inform people that both rectangular and circular bed nets can prevent malaria, and that rectangular bed nets can be used for all sleeping spaces. Indeed people in Guinea are not used to rectangular nets and seem to prefer using the circular ones, based on *StopPalu*'s previous experience with LLIN distribution and education. However, for this campaign, only rectangular nets were procured for distribution. Therefore, the project worked with the NCC's sub-committee for BCC to develop strategies and approaches to encourage the use of the distributed rectangular nets.

During the third quarter, in collaboration with the NCC's sub-committee for BCC, *StopPalu* produced several radio and television spots to promote the campaign's distribution activities and to promote the correct use of the nets after distribution. The campaign was intended to counter previous experience from 2013 showing that after people received their nets, they often put them in a suitcase or under their bed. The project also produced a spot on how to transform a net from a rectangular shape to a circular one. This transformation technique helped the population accept the rectangular nets.

BCC materials—tee-shirts, caps, and banners—with key messages about distribution and net use were also produced. In addition, the project produced and broadcast television and radio spots on bed-net use. The idea was to inform people that they need to correctly and regularly use the nets that they received. The spots also emphasize that both rectangular and circular bed nets could prevent malaria, and that rectangular bed nets could be turned to circular ones.

Activity 1.1.1.4 Conduct cascade trainings of community health agents and supervisors (micro-planning, logistics, social mobilization, enumeration, and distribution) for universal distribution campaign. During the reporting period, the project team conducted several trainings on the mass LLIN distribution campaign. The first one focused on micro-planning, the second on logistics, the third on enumeration and social mobilization, and the fourth on distribution and monitoring.

1. *Training on micro-planning*

During February 5–8, 2016, an AMP consultant trained the national trainers on the micro-planning tools (forms). The objective of the training was to allow trainers to become familiar with the micro-planning tools and learn how to fill them out. The training reinforced their capacities on household calculation methods based on the size of the population, the number of LLINs needed, the amount of storage space required, the transport of LLINs, the number of distribution sites based on the number of households per site, and the criteria for identifying a distribution site. At the end of the training, the trainers were divided into groups to conduct the same training in the various regions of the country.

At the regional level, four people from each DPS—the Prefectural Health Director, the doctor in charge of disease, the doctor in charge of statistics, and director of prefecture micro-projects (*directeur de micro réalisations*)—and four people from the DRS—the Regional Health Director, the doctor in charge of disease, the doctor in charge of statistics, and Director of the Regional Office for Support to Communities and Coordination of Cooperative and NGO Interventions (*Service régional d'appui aux collectivités et de coordination des interventions des coopératives et ONG*)—participated in the training. In the project-supported regions, 93 regional and prefectural trainers were trained (23 in the region of Boké, 24 in Conakry, 16 in Kindia, and 30 in Labé).

At the end of these trainings, the teams of trainers also trained 745 people at the health center level on micro-planning. At each health center, four people were trained: the head of the health center, the EPI agent, a CSH member, and a representative of the project's NGO partners. In Conakry, because of the low number of health centers compared with the population, the project included 140 neighborhood leaders in the training and micro-planning process. Thus in total, in the 14 prefectures and five communes, 838 people were trained: 412 health workers, 280 CSH members, and 146 neighborhood leaders or NGO facilitators.

Boké *Labé*
Training of regional and prefectural trainers on enumeration and social mobilization

A summary of the number of people trained, by region and health district, is shown in ***Table 1.***

Table 1: Staff trained on micro-planning for the LLIN distribution campaign

Prefectures/ Conakry communes	Participants			
	Health staff	Local NGO / CSH staff	Local authorities and leaders	TOTAL
Boffa	16	24	1	**41**
Boké	33	26	2	**61**
Fria	17	12	1	**30**
Gaoual	22	17	1	**40**
Koundara	21	14	1	**36**
Dixinn	15	8	18	**41**
Kaloum	15	9	13	**37**
Matam	16	5	26	**47**
Matoto	15	15	40	**70**
Ratoma	19	23	30	**72**
Coyah	13	16	4	**33**
Dubréka	19	17	1	**37**
Forécariah	23	23	2	**48**
Koubia	15	5	1	**21**
Labé	44	25	1	**70**
Lélouma	28	13	1	**42**
Mali	29	12	1	**42**
Tougué	34	8	1	**43**
Dinguiraye	18	8	1	**27**
Total	**412**	**280**	**146**	**838**

2. Training on logistics

During February 2016, the project organized training for the MOH pharmacists of the 19 DPSs/DCSs and four DRSs supported by the project, as well as for the project's NGO partners, on logistical management of LLINs for the campaign. The training was facilitated by the AMP consultant, the NMCP, and project staff. In all, 41 participants attended the training. The objectives were as follows:

- Explain the role of the participants in the logistical management of the campaign
- Strengthen the capacity of participants on LLIN traceability
- Strengthen the knowledge of participants on the use of LLIN control and monitoring tools

At the end of the training, the following recommendations were made:

- Send the LLINs to the distribution sites based on the enumeration data
- Supervise the prefectural warehouses before the arrival of the LLINs, using the developed tools
- Include all the logistics activities in the budget

- Conduct an inventory of the warehouses after delivery, as well as carry out periodic (but unscheduled) inventory control and monitoring during delivery of LLINs to the warehouse and to the distribution sites
- Mobilize additional financial resources for the additional LLINs needed
- Update the delivery plans for each level and share the plans with the participants, to enable them to supervise appropriately at each level

Next steps:

- Select the transport companies to move the LLINs from Conakry to the regions and from the regions to the districts and to the distribution sites
- Produce and distribute the logistics management tools before the arrival of LLINs
- Supply regions and districts with management tools according to the storage plan
- Transport the LLINs based on the strategy and the updated positioning plan

3a. Training of trainers (TOT) on enumeration and social mobilization

The enumeration training process was a cascade training with three levels. The first level involved the training of regional and prefectural trainers, who trained the health facility trainers, who then trained the enumeration agents.

After the completion of the micro-planning exercise, and to prepare for the household enumeration phase, the project, in collaboration with the NMCP, organized training for a pool of regional and prefectural trainers and supervisors on enumeration, social mobilization, and distribution activities. This three-day training involved the doctors in charge of training, the doctors in charge of planning, and directors of prefecture micro-projects from the DPSs and DRSs, plus representatives of the project's local NGO partners. The training was organized in two sessions—one in Labé and the second in Boké. A combined total of 71 trainers/ supervisors were trained. The objectives of these trainings were for trainers and supervisors to understand the enumeration process and strategy, the profile and duties of enumeration agents, the selection process of the agents, the key social mobilization messages, and the supervision strategy. The training also familiarized the participants with all the tools for the various activities, and gave them an overview on how to complete them.

At the end of the trainings, these new trainers traveled to the 14 prefectures and trained the trainers from 130 health centers in two-day workshops. At each health center, a minimum of three people were trained: the head of the health center, a CSH member, and one or two facilitators from the project's NGO partners. In the prefectures where the NGO partners did not have enough agents to cover the zones, the project regional team identified other field agents who know the villages very well and have experience from the previous campaign or mass community activities. A total of 462 health facility trainers were trained.

During these trainings, the enumeration agent selection criteria were shared and discussed. Project and NMCP staff emphasized that these criteria would have to be used and followed. Each health center team was told the number of enumerators to be identified and selected in their coverage area. The number of enumerators per health center was based on the estimated number of households covered by the health center, divided by 25 times 10 days. (This was based on the estimation that each team of enumerators would visit an average of 25 households per day in the prefectures for 10 days.) The health facility trainers will train the enumeration agents from selected zones covered by their health facility.

Training of health center trainers in Forécariah

Training of health center trainers in Coyah

Table 2 presents the details of regional, prefectural, and health facility staff who were trained on enumeration and social mobilization for the 2016 LLIN mass distribution campaign.

Table 2: Regional, prefectural, and health facility staff trained on enumeration and social mobilization

Regions	Prefecture	Participants		
		Men	Women	Total
Boké	Boké	41	11	52
	Boffa	33	0	33
	Gaoual	32	2	34
	Fria	24	5	29
	Koundara	24	4	28
Labé	Labé	67	15	82
	Lélouma	42	2	44
	Mali	49	2	51
	Koubia	23	0	23
	Tougué	28	5	33
	Dinguiraye	30	1	31
Kindia	Dubréka	33	2	35
	Coyah	21	4	25
	Forécariah	31	2	33
Total		**478**	**55**	**533**

3b. Training of enumeration and social mobilization agents

In April 2016, *StopPalu* conducted TOTs for health center staff in the project-supported prefectures and Conakry communes. After these TOTs, the health center trainers returned to their facilities and worked with local authorities to select enumeration agents, based on the criteria that were shared during the training. However, as in 2013, the selecting agents was not an easy task, particularly in Conakry, where most of the heads of health centers attempted to make the selection alone, without involving local authorities. Sometimes local authority members wanted to be the enumeration agent themselves (even when they did not meet all the criteria) so that they would be paid.

The number of enumerators needed per health center was based on the estimated number of households covered by the health center, determined by dividing the estimated number of the population (ascertained during micro-planning) by 7, the standard method of calculating people per household in Guinea. The estimation was that each team of enumerators would visit an average of 40 households per day in Conakry.

The health facility trainers trained the enumeration agents from selected zones covered by their health facility. During the trainings, as for the 2013 campaign, the project team had to replace some participants who did not meet the criteria—they were not residents, could not read or write, or were too old to walk all day—but they had nevertheless been selected by some heads of health centers. In some cases, *StopPalu* asked these leaders to bring their sons to replace them, a last resort in order to have them leave the training room to enable us to start the training. In other prefectures, the team also found that some heads of health centers did not involve the mayors in the selection process, despite this being recommended during the TOT. We therefore asked the mayors to be involved in the following round of selection because they were more familiar with the communities.

The objectives of this training were to allow the agents to understand the enumeration process and strategy, their duties, and key messages for social mobilization. The training also allowed participants to become familiar with the enumeration tools (forms) and the correct way to fill them out.

In total, 171 workshops were held in the 14 prefectures, and 5,142 people were trained. The trainings in Conakry were held May 1–3 (after the enumeration activities in the 14 prefectures), and 2,288 agents were trained.

Training for enumeration agents

Working group discussing enumeration

A summary by region and health district of the number of people trained in the 14 prefectures is shown in ***Table 3; Table 4*** presents a summary of health facility staff from Conakry trained in the TOT; and ***Table 5*** shows the number of enumeration agents trained for activities in Conakry.

Table 3: People trained on enumeration and social mobilization for the LLIN distribution campaign in the 14 prefectures

Prefecture	Participants		
	Men	Women	Total
Boffa	300	50	350
Boké	900	199	1,099
Coyah	252	65	317
Dubréka	413	63	476
Dinguiraye	241	53	294
Forécariah	407	49	456
Fria	88	15	103
Gaoual	233	50	283
Koubia	112	25	137
Koundara	144	38	182
Labé	288	176	464
Lélouma	214	81	295
Mali	282	110	392
Tougué	241	53	294
Total	**4,115**	**1,027**	**5,142**

Table 4: Health facility trainers trained on enumeration and social mobilization for the LLIN distribution campaign in Conakry

Commune	Health workers	CSH members	NGO facilitators	Total
Dixinn	8	4	14	26
Kaloum	8	5	8	21
Matam	16	2	14	32
Matoto	13	3	35	51
Ratoma	16	9	35	60
Total	**61**	**23**	**106**	**190**

Table 5: People trained on enumeration and social mobilization for the LLIN distribution campaign in Conakry

Commune	Participants		
	Men	Women	Total
Dixinn	164	43	207
Kaloum	69	34	103
Matam	148	104	252
Matoto	504	168	672
Ratoma	781	273	1,054
Total	**1,666**	**622**	**2,288**

4a. Training on distribution

After the enumeration process, the project updated the micro-planning data as well as the number of distribution sites. Then, in a one-day session, ***StopPalu*** trained the health center trainers and supervisors from the 14 prefectures and five communes of Conakry on distribution activities. (As stated above, the training in the prefectures occurred first, and the project waited to conduct training in Conakry until after the distribution in the prefectures was completed.)

The objectives of this training were to ensure the trainers understood the distribution process, the profile and duties of each of the agents at the distribution site, how to organize the distribution site, how to supervise the distribution activity, the levels of supervision, and how to dispose of waste. In addition, the training allowed participants to become familiar with the management tools (forms) for distribution, supervision, and waste disposal.

During May 14–16, 490 trainers from health centers were trained. The health center trainers then selected distribution agents from among those who had conducted the enumeration activities (five agents per distribution site). For the 565 sites, a total of 2,826 agents were selected and trained on distribution May 21–22 in the 14 prefectures.

After the distribution activities in the 14 prefectures, the project team trained the health center trainers from Conakry on distribution. During June 18–20, a total of 216 health facility trainers were trained. At the end of these trainings, each health center trainer organized a training for their distribution agents. A total of 1,447 agents were trained in Conakry.

Training for distribution agents in Forécariah

Training for distribution agents in Boké

Table 6 presents details on the trainers participating in the distribution TOT in the 14 prefectures; ***Table 7*** summarizes the distribution agents trained in the prefectures. ***Table 8*** presents details on the Conakry trainers, and ***Table 9*** shows information on the distribution agents trained in Conakry.

Table 6: Trainers trained on distribution for the campaign in the 14 prefectures

Prefectures	Health workers	CSH members	NGO facilitators	Total
Boffa	12	8	14	34
Boké	16	13	34	63
Coyah	8	5	13	26
Dubréka	8	8	14	30
Dinguiraye	8	8	10	26
Forécariah	12	10	19	41
Fria	10	6	8	24
Gaoual	12	8	12	32
Koubia	6	6	6	18
Koundara	13	7	8	28
Labé	18	18	19	55
Lélouma	11	11	12	34
Mali	14	11	17	42
Tougué	14	10	13	37
Total	**162**	**129**	**199**	**490**

Table 7: People trained on distribution in the 14 prefectures

Prefecture	Participants		
	Men	Women	Total
Boffa	190	15	205
Boké	400	85	485
Coyah	145	42	187
Dubréka	238	35	273
Dinguiraye	138	23	161
Forécariah	246	33	279
Fria	66	10	76
Gaoual	129	36	165
Koubia	66	19	85
Koundara	77	33	110
Labé	159	134	293
Lélouma	117	51	168
Mali	163	73	236
Tougué	80	23	103
Total	**2,214**	**612**	**2,826**

Table 8: Trainers trained on distribution in Conakry

Commune	Health workers	CSH members	NGO facilitators	Total
Dixinn	9	3	18	30
Kaloum	7	6	19	32
Matam	8	1	14	23
Matoto	5	6	36	47
Ratoma	15	12	57	84
Total	**44**	**28**	**144**	**216**

Table 9: People trained on distribution in Conakry

Commune	Participants		
	Men	Women	Total
Dixinn	128	37	165
Kaloum	92	22	114
Matam	86	49	135
Matoto	360	108	468
Ratoma	415	150	565
Total	**1,081**	**366**	**1,447**

4b. Training for monitoring the enumeration activities

To assess the quality of the enumeration, NCC, CDC/Atlanta, and the AMP consultants developed a monitoring system. The monitoring agents were staff members who do not work for the MOH. They received a one-day orientation to understand the monitoring system, the selection of households, how to fill out tools (forms), and the reporting system. This training took place April 9–10, 2016, in Kindia for the 27 monitors for the 14 prefectures, and on May 4 for the 17 monitors for Conakry.

Training monitors in Conakry

Activity 1.1.1.5 Conduct micro-planning, budget development, logistics, and distribution plan for the universal campaign at prefectural, regional, and central levels. During the second quarter, after the micro-planning training, the teams trained at the health centers returned to their communities to collect information and fill in the micro-planning forms. The information collected by each health facility team helped estimate the LLIN needs, material needs (registers, materials to record distribution, vouchers, markers, pens, chalk), staffing needs

(enumerators/mobilizers, distribution agents, supervisors), distribution points (number and location), and storage space for each health center. The number of nets was estimated by dividing the number of population by 1.7; the number of households by dividing the number of population by 7; the number of enumerator teams by dividing the number of households by 25 times 10 days in the prefectures. The number of distribution sites was calculated by dividing the number of households divided by 300 times 5 days in the urban areas. In the rural areas, the number of distribution sites was equal to the number of households divided by 200 times 5 days.

After collecting the information, feedback workshops were organized. During these workshops, each health center presented the information it had collected and discussed it with other health centers; prefectural and regional authorities corrected the data when necessary and validated the data per health center. It is important to mention that the micro-planning agenda was affected by the fact that the national immunization campaign changed its dates several times.

The summary results of the micro-planning per health district are shown in ***Tables 10 and 11.***

Table 10: Results of the micro planning in the 14 prefectures

Region	Prefecture	Population	Households	Distribution Sites	Estimated LLINs needed
Labé	Labé	441,876	63,125	57	245,487
	Lélouma	236,558	33,794	32	131,421
	Mali	333,867	47,695	46	185,482
	Tougué	136,455	19,494	21	75,808
	Koubia	108,272	15,467	17	60,151
	Dinguiraye	264,130	37,733	38	146,739
BOKE	Boké	869,386	124,198	106	482,992
	Fria	107,043	15,292	15	59,468
	Boffa	276,655	39,522	40	153,697
	Gaoual	223,083	31,869	32	123,935
	Koundara	151,440	21,634	22	84,133
Kindia	Forécariah	356,433	50,919	55	198,018
	Dubréka	429,780	61,397	50	238,767
	Coyah	321,629	45,947	36	178,683
TOTAL		**4,256,607**	**608,087**	**567**	**2,364,782**

Table 11: Results of the micro-planning in Conakry

Region	Prefecture	Population	Households	Distribution Sites	Estimated LLINs needed
CONAKRY	Dixinn	253513	36216	24	140,841
	Kaloum	128355	18336	12	71,308
	Matam	282025	40289	27	156,68
	Matoto	796367	113767	76	442,426
	Ratoma	841908	120273	80	467727

	TOTAL	**2,302,168**	**328,881**	**219**	**468,538**

Activity 1.1.1.6 Conduct social mobilization activities to promote the population's acceptance of enumeration (one week before enumeration and during the enumeration period). During the second quarter, to facilitate people's acceptance of enumeration, *StopPalu* organized advocacy meetings in the 14 prefectures with local officials and community members to explain the distribution campaign process and the importance of having the entire community participate in the enumeration. In each prefecture, the prefect, all the mayors, all the sub-prefects, opinion leaders, traditional communicators, and religious leaders attended these meetings. During the meetings, project and NMCP representatives presented information about the following:

- The main steps and the dates of the campaign (enumeration, distribution, post-distribution visits)
- The selection criteria of enumeration and social mobilization agents
- The importance of these leaders' involvement in the selection of the agents and adherence to the NMCP-validated criteria
- The roles of enumeration and social mobilization agents during the household visits
- The content and importance of the vouchers
- The roles of local officials in the success of the campaign (community mobilization and involvement, use of distributed nets, and supervision)
- Some weaknesses observed and lessons learned during and after the 2013 distribution campaign (e.g., during the post-distribution visits at the end of the campaign, it was discovered that only 30% of the distributed nets were hung; not all households members sleep under nets; the number of malaria cases were high in some prefectures; etc.)

After the presentation, participants asked questions and facilitators responded. Participants were divided into groups to propose ways to increase the use of distributed rectangular nets and the success of the campaign. The main recommendations were as follows:

- Organize hanging campaign days in each village involving all community members
- Increase communication activities using schools, mosques, and churches to promote regular and correct bed net use
- Produce radio and television spots forbidding the use of nets for other purposes
- Allocate responsibility to the mayors and sub-prefects to make sure that the distributed nets are hung and used by their communities

A total of 642 participants attended the advocacy meetings (see ***Table 12***).

At the end of the meeting, the prefects promised to follow up on the implementation of these recommendations and sanction any mayor or sub-prefect who would not take action for the correct use of these nets.

Advocacy meeting in Forécariah with the prefect

Advocacy meeting in Labé

Table 12: Participants at the advocacy meetings, per prefecture

Regions	Prefecture	Participants		
		Men	Women	Total
BOKE	Boké	56	4	60
	Boffa	80	5	85
	Gaoual	47	2	49
	Fria	40	5	45
	Koundara	42	4	46
LABE	Labé	59	0	59
	Lélouma	33	1	34
	Mali	31	0	31
	Koubia	15	0	15
	Tougué	22	0	22
	Dinguiraye	23	0	23
KINDIA	Dubréka	64	4	68
	Coyah	44	8	52
	Forécariah	52	1	53
Total		**608**	**34**	**642**

During the third quarter, for the enumeration activities in Conakry, *StopPalu* also organized these advocacy meetings with local officials (mayors and *chefs de quartier*) and community members to explain the distribution campaign process and the importance of having the entire community participate in the enumeration. The advocacy meetings were held in the five communes. The main recommendations were as follows:

- Increase communication activities using schools, mosques, and churches to promote the campaign and the use of regular and correct bed net use
- Produce radio and television spots forbidding the use of nets for other purposes
- Allocate responsibility to the mayors and *chefs de quartier* to make sure that the distributed nets are hung and used by their communities

A total of 379 participants attended the advocacy meetings in Conakry.

Advocacy meeting in Kaloum

Advocacy meeting in Boké

To facilitate people's acceptance of enumeration in the 14 prefectures, the *StopPalu* team organized roundtables, interactive programs, and public radio shows in each prefecture. The project also produced radio spots that were broadcast 5 days before and during the 10 days of enumeration. These activities helped explain to the population the enumeration process, when it would be conducted, the importance of being registered and having the vouchers, and the importance of the nets. The communication activities also helped people understand and accept having the enumeration team in their households. In some prefectures such as Coyah, Dubréka, and Forécariah that had been highly affected by Ebola, these activities helped allay the population's fears and explain to people that the distribution activities had nothing to do with the Ebola epidemic—this campaign aimed to fight malaria. The messages reduced the reluctance some people in these prefectures felt about participating. During the interactive radio programs, some households that had not received a visit from the enumeration team called in and told the project teams about their situation; through this effective communication activity, they were visited and registered. A total of 24 radio programs were produced.

Interactive radio program

Roundtable discussion

Activity 1.1.1.7 Conduct enumerations in targeted prefectures for universal distribution and voucher distribution. For rigorous micro-planning, including all necessary distribution data for a successful universal campaign, exact figures on the beneficiary population were essential. For this reason, enumeration was a key phase of the campaign. From April 13 to 22, 2016, *StopPalu* organized enumeration activities in all 14 prefectures (lasting 10 days). The project insisted that a weekend be included in the enumeration period to allow public and private

employees to participate in the activity. The goal was to enumerate 100% of the households estimated in the micro-plans, give each of them a voucher with the number of nets they would receive during the distribution, and disseminate key messages on the correct and regular use of the nets.

This activity was carried out by the 5,142 trained enumerators selected by heads of health centers and elected officials in each village and was closely supported by supervisors from the project NGO partners, heads of health centers, CSH members, health authorities, project staff members, and local officials.

The first phase of enumeration was to classify the distribution vouchers by distribution site, health center, prefecture, and region. This activity may seem mundane, but it was crucial to the smooth operation of the enumeration process. In fact, two weeks before the start of the enumeration activity, the project team made a notation of the name of the distribution sites, the health center, and the prefecture on each voucher book (based on micro-planning data). This allowed the project to track the use of vouchers and also reduced the strain on various distribution sites in terms of validating coupons presented by heads of households. Closely monitoring the use of the vouchers was very important to avoid fraud and deliberate misuse of any empty vouchers remaining (to obtain additional nets) at the distribution sites.

The project distributed other campaign materials, such as tee-shirts, caps, banners, chalk, and data collection forms, to each distribution site, health center, and prefecture. Students identified by the project provided very important logistics support for these tasks.

The enumeration strategy was a door-to-door visit. As in 2013, for each area covered by a health center, the enumerators were divided into groups—on average 11 people (five two-person teams and a group leader). The group leaders oversaw the work of each group of 10 persons. To avoid double counting households, group leaders directed workers from each group to coordinate with each other and visit the households alternately according to the enumeration plan that they developed. The team of enumerators (two agents) visited each household covered by the 130 health centers in the 14 prefectures; counted the number of sleeping spaces; and identified the number of people living in the household, and the name of the head of the household or its representative. For this campaign, the NCC members agreed to not count the number of pregnant women and the number of children under age five. (These numbers were not used for the campaign because these beneficiaries could obtain free nets at ANC and EPI visits.) However, for this year the NCC recommended that the enumerators register public health facilities, military camps, and schools that have sleeping spaces. For each of these facilities, one voucher was used and the head of the facility was considered the head of household.

Enumerator agent in Boké

Enumerator agent in Coyah

Among the enumerator teams, one of the agents was the enumerator who completed the vouchers[1] and gave the yellow copy to the head of each household with the number of LLINs to be distributed clearly indicated, one per sleeping space. The enumerator kept the original and the blue copy. During the visit, the second agent, the social mobilizer, provided key messages on the cause of malaria, the importance of net use in malaria prevention, the phases of the campaign, the dates of the distribution, and the site where the household representative should go to receive the free nets during the distribution phase. He/she also emphasized the importance of keeping the voucher until the distribution. No voucher, no LLIN. Each team of enumerators visited approximately 30 households per day in rural areas and 40 households per day in urban areas. It is important to mention that in 2016, based on the experience of the 2013 campaign, the NCC members have reduced the number of households to be visited by the enumerator's team to 30 instead of 35 in rural areas and 40 instead of 50 in urban areas. That reduction helped the enumeration teams finalize the enumeration in most of the prefectures supported by the project in a 10-day period. In some prefectures of Labé and in the prefectures of Coyah, where the population is widely dispersed, the enumerators extended their work for two days, but at no cost with the involvement of local authorities (DRS, DPS, and the governor). However, in the prefectures of Dubréka, the enumerators were paid for the two days of extended work.

During the enumeration process, one Ebola contact person was found in one village in Dinguiraye. The National Ebola Coordination Committee decided to put the entire village on quarantine. The project informed the NCC about the situation, and they decided to stop the enumeration activities in that village; an estimated number was used for the distribution.

Based on the experience during the 2013 campaign, the project team added some innovations that helped improve the quality of enumeration. The first one was to write "LLIN" (with chalk) and the number of households visited on each door after the visit. For example if two households out of three were visited, the notation would read "LLIN 2/3"; if none of the three households was visited because the inhabitants were absent or the people did not let the team enter, the notation would read "LLIN 0/3." These notations helped identify households that were not visited and were also a means for household representatives who were not present during the enumerator's visit to know that some visitors came during their absence. The second innovation was to leave the enumerator agent's phone number for the household representatives to call so that a convenient date and time for their enumeration could be arranged (in cases where the household members were away). The third innovation was using radio to communicate a phone number that people could call to indicate their location in order to participate in enumeration. These three simple, easy-to-implement innovations significantly helped increase the number of households enumerated, especially in urban areas.

Enumeration in big urban areas was sometimes very challenging. For Conakry, based on the 2013 experience, the project enumerated the families who live in special places such as schoolyards, hospitals, or businesses. In fact during the 2013 campaign, which was the first campaign, it was discovered too late that some families were not enumerated because they lived in these unusual places that are not considered to be a normal household.

In addition, the project made special arrangements to enumerate families living in apartment buildings. In most of these buildings, there were security services that prevented teams from going into the buildings. For each apartment building, *StopPalu* contacted someone known to the project or enlisted the help of the *chefs de quartier*; in this way, the teams made

[1] Each voucher booklet included 20 three-ply vouchers, with white (original), yellow, and blue copies.

appointments with household representatives (usually on a weekend) to conduct the home visit and enumeration. This strategy helped the team enumerate most of the households that are located in those buildings.

To ensure the quality of the enumeration and the data, and based on the experience during the 2013 campaign, the project instituted a multi-level supervisory system.

At the sub-prefecture level, each supervisor supervised two groups and was responsible for ensuring that all the households in his supervisory area were visited. In addition, the supervisors were responsible for verifying the data and compiling them at the health facility level.

The project also set up prefecture-level supervisor teams composed of one project staff, three people from the DPS, the DPS Director, the DPS person in charge of disease, and the director of prefecture micro-projects. These people supervised the activity in the entire prefecture. The three DPS supervisors visited households to verify the voucher data and informed the sub-prefecture supervisor of any discrepancies found.

At the regional level, three people served as supervisors: the DRS Director, the DRS person in charge of disease, and a community representative. They supervised the activity in all prefectures of the region.

The NCC, in collaboration with CDC and AMP, established a monitoring system. Based on the number of enumeration groups per prefecture, a certain number of monitors were identified. These monitors were selected from among the public services other than the health sector. The first step in the monitoring was assigning the four groups that each monitor would assess during the 12 days of work. The day before the beginning of the monitoring, all the monitoring agents for the prefecture or commune met at the DPS or the DCS to receive their assignments.

The numbers of each group were written on paper, and each monitor was given the four groups he/she would monitor. Monitors had to ensure that the groups were not from the same area to ensure better coverage of the prefecture or commune. Each monitor was required to follow a group for three days. He/she needed to visit 20 households per day, and at the end of the third day, after visiting 60 households, the monitor sent a report to the DPS with the percentage of agreement (consistency) between the information written on the voucher kept by the household and the information received by the monitor. If the agreement rate was below 10%, then the quality of the enumeration was deemed insufficient and the enumeration team had to revisit the households involved.

This multi-level supervisory system helped prevent fraud and correct any mistakes that might have been made by enumerators. However, it is important to mention that the project rapidly identified some weaknesses with the monitoring system due to the following reasons:

- The selection criteria for the monitors were not very detailed, therefore some of the monitors were very old and could not walk long distances.
- One day of orientation was not enough time to thoroughly train the enumerators, especially in terms of participants understanding how to randomly select households to be visited in the selected zone. Also most of the monitors did not understand how to fill out the reporting forms or the reporting system and timeline.
- The reporting system was not clear, even at the NCC level. The expectation was that the DPS would review the report submitted by the monitors and then take the appropriate actions. However, the DPS did not have that information, so their

understanding was that they needed to send all the reports to Conakry and wait for recommendations.

To improve the system, the project team in many of the prefectures conducted additional trainings for monitors to explain to them the system, especially how to select households and how to fill out the forms. During the enumeration phase in Conakry, the project tried to improve the monitoring system by adding more selection criteria, such as having previous experience on community activities (household registration), being less than 50 years old, and also being able to correctly fill out the data collection tools. In Conakry, *StopPalu* also added monitors from local NGOs who already work in these communes and therefore know the communities and can easily fill out forms.

Monitors/supervisors in the field

At the end of every day, supervisors and enumerators at different levels met to verify data and discuss key issues, such as household refusals or absences for different reasons, hard-to-reach villages, and households that needed revisiting because of the unusually high number of nets allocated on the vouchers (more than seven[2]). It is noteworthy that during this campaign, there were fewer cases of suspiciously high numbers of allocated nets on the vouchers. The reason for this is that because of people's experience in 2013, they understood that there is no need to cheat; all households would be covered. During these meetings, the team proposed solutions to solve the issues raised and planned for the next day's priorities. At the end of each meeting, the data from the previous day was sent to the central level.

This year, *StopPalu* insisted that for each enumeration team, the actual number of households visited per day be compared with their targeted number of visits. This strategy helped the project monitor the progression of the teams in the different sectors and villages and avoided having sectors or villages that had not been reached at the end of the 10 days. In addition, through this method the project identified cases of reluctant beneficiaries in some of the villages in Coyah, Dubréka, and Forécariah prefectures—the population did not want to allow the enumeration teams to enter their houses. These people said that in 2014, a few months after the bed net distribution campaign, the Ebola outbreak occurred, so this year they did not want the nets. The project team informed the DPS and local authorities (the prefect and the mayor). After several meetings and negotiations, most of the families accepted a visit from the enumeration teams. However, other families only acquiesced during the distribution phase when they saw that all their neighbors were receiving free nets.

[2] The average number of nets allotted per household was four to five; more than seven nets raised an alert of over-allocation.

At the end of the 10 days of enumeration, 597,322 households and 2,525,908 sleeping spaces were enumerated in the 14 prefectures (compared with 608,085 households and 2,364,782 sleeping spaces estimated in the micro-plans). For Conakry, after the 10 days of enumeration, there were some sectors in the communes of Matoto and Ratoma, the two biggest communes of Conakry, that were not totally enumerated. The project team, in agreement with the mayors and *chefs de quartier*, decided to add two more days to allow the remaining households to be enumerated. After 12 days of activity, the project enumerated 351,658 households and 1,132,969 sleeping spaces (compared with 328,881 households and 1,278,982 sleeping spaces estimated in the micro-plans).

Tables 13 and 14 present a summary of enumeration activities, by prefecture and commune.

Table 13: Summary of enumeration activities in the 14 prefectures

PREFECTURES	Population in micro-plan	Population enumerated	Households in micro-plan	Households enumerated	No. of sleeping spaces enumerated	Population coverage rate	Household coverage rate
Labé	438359	417405	62623	70535	279350	95%	113%
Lélouma	236543	190652	33794	33165	124877	81%	98%
Koubia	107882	108925	15374	15741	68161	101%	102%
Mali	333590	289817	47654	46501	172046	87%	98%
Tougué	137245	143100	19607	19703	92840	104%	100%
Dinguiraye	264099	302198	37728	36078	170518	114%	96%
Boké	861794	741847	122869	105920	423251	86%	86%
Boffa	280003	304399	40000	39997	173834	109%	100%
Fria	107043	147882	18522	15710	84520	138%	85%
Gaoual	223073	239192	31868	29374	144182	107%	92%
Koundara	151840	163663	21632	19122	93338	108%	88%
Forécariah	356433	422973	50920	53017	240551	119%	104%
Dubréka	429780	500076	61397	63575	277820	116%	104%
Coyah	321629	349929	45947	48884	180620	109%	106%
TOTAL	**4249313**	**4322058**	**609935**	**597322**	**2525908**	**102%**	**98%**

Table 14: Summary of enumeration activities in Conakry

COMMUNES	Population in micro-plan	Population enumerated	Households in micro-plan	Households enumerated	No. of sleeping spaces enumerated	No. of LLINs enumerated	Population coverage rate	Household coverage rate
Kaloum	253513	105196	36216	15274	49500	49500	41%	42%
Dixinn	128355	230293	18336	39338	113135	113135	179%	215%
Matoto	282025	876841	40289	117180	421976	421976	311%	291%
Ratoma	796367	893032	113767	142308	440091	440091	112%	125%
Matam	841908	245701	120273	37558	108267	108267	29%	31%
TOTAL	**2302168**	**2351063**	**328881**	**351658**	**1132969**	**1132969**	**102%**	**107%**

1.1.1.8 Conduct communication, BCC, and advocacy activities at the community level on the distribution campaign and correct use and maintenance of LLINs. Based on the communication plan for the mass distribution campaign that *StopPalu* helped the NCC develop, the project conducted several communication activities during this quarter to facilitate people's acceptance of and participation in the distribution.

As was done for the FY 2013 campaign, the project produced several radio and television spots to inform the public about the distribution process, the location of distribution sites, the importance of bed nets, and how to use and maintain the nets. In total, 1,606 radio spots and 88 television spots on the promotion of the distribution activities, and 1,006 radio spots and 66 television spots on correct and regular use of nets were broadcast in the 14 prefectures and five communes of Conakry.

One innovation this year was the use of mobile caravans that circulated in neighborhoods and villages to inform people about the dates and sites of the distribution and encourage people to go to the sites to receive bed nets. These caravans were operated by local NGO agents. They stopped in public places such as markets, major intersections, and soccer fields to encourage people to go pick up their nets. The day before the end of the distribution activities, the caravans also informed the population that the next day would be the last day of the distribution. These caravans were very helpful, especially in urban areas where people are very busy during the day and do not have time to listen to the radio. Also, these caravans allowed the facilitators to interact with people and address concerns they had. During distribution in Conakry, the project realized that many households had lost their coupons. *StopPalu* used mobile caravans to inform the population that households that lost their coupons could come to distribution sites and they would receive their nets since the distribution team had all the original vouchers at the distribution site. This approach enabled many households to receive their LLINs (households that might have been discouraged by the loss of the coupon and thus would not have attempted to visit the site).

It should be noted that this year *StopPalu* increased and highlighted communication activities for several reasons: the campaign took place during the rainy season and agricultural period in the prefectures. It was also a typical time of year for marriages as well as Ramadan, so people had other priorities. In addition, the various changes of distribution dates created confusion among beneficiaries. These changes of dates were due to delays in the arrival of LLINs and also logistical errors—some quantities of nets purchased by GFATM that should have been distributed in prefectures near Conakry (Coyah, Dubréka, and Forécariah) were sent to Labé and Mamou. The project therefore had to transport them back to the intended prefectures. For this reason, the distribution in these three prefectures was not conducted at the same time as the other 11 prefectures.

Another innovation in communication activities was the organization of a second round of advocacy meetings with the *chefs de quartier* (neighborhood leaders) and heads of health centers of Conakry to re-energize campaign activities before actual distribution. Given the time between enumeration and distribution activities (more than a month), these meetings helped to explain to local authorities the reasons for changes in distribution dates, and discuss with them how to change some distribution sites that were problematic. During these meetings, the project teams and the NMCP representatives also emphasized that these local authorities should inform their constituents about new distribution dates and sites and encourage community members to pick up their nets. These meetings helped to identify solutions to problems raised and to obtain the support of the authorities for the success of the activity.

Distribution sites that were problematic (e.g., because those particular sites had no shelter for people during rain or because the sites were at schools that would be involved in annual schools exams) were moved, but not far from the original site so that people could easily find them. The authorities informed imams and youth and women associations' leaders in their neighborhoods so that the entire population was informed of any new distribution dates and sites. For the distribution activities, five advocacy meetings were conducted, one per commune.

To increase the use of rectangular LLINs distributed during the campaign, the project produced a radio and a television spot on how to transform a rectangular LLIN into a circular one. The project produced another radio and television spot highlighting that both rectangular and circular LLINs are effective and are the best means to prevent malaria. All these materials were translated into the four major national languages to facilitate the population's understanding.

Advocacy meeting with local leaders

1.1.1.9 Transport and store LLINs at the distribution points (via region, prefectures, and health centers). The 2016 campaign experienced several logistic difficulties that unlike those that occurred in 2013 were not due to road conditions or to carriers but rather to procurement and shipment issues.

There were several delays in the arrival of LLINs in the country. Also, LLINs were purchased by several donors, which caused problems, especially because the *StopPalu* team did not always have the correct information about the arrival date, the storage location, or the quantities *StopPalu* needed to receive for its prefectures. This lack of information led to a delay in distribution in areas supported by the project. For example, all LLINs purchased by GFATM for the campaign were sent to regional warehouses, regardless of in which prefectures these quantities were to be distributed. The stock for the prefectures of Coyah, Dubréka, and Forécariah were transported to Kankan, Labé, and Mamou, which resulted in additional costs and time to bring these quantities back to the correct prefectures.

Regarding LLINs purchased by the Senegal River Basin Development Organization (*Organisation pour la mise en valeur du fleuve Sénégal* [OMVS]), OMVS did not allow the project to receive them before the official donation ceremony to the MOH, which took many days to be organized, delaying yet again their transport and distribution, and causing additional stress and organizational constraints to the project team in terms of scheduling and planning.

Furthermore, *StopPalu*'s experience was that each partner organization tended to focus most intensely on its own area and did not provide the same level of effort for areas it was

not specifically targeting. For example, the project discovered that the first quantities of LLINs procured by GFATM were released from the port within 24 hours, while those for the *StopPalu* prefectures took at least four days. This was very frustrating for the project teams—they had to continuously change dates and approaches, and think of ways to reduce the delays. It was very difficult to return to communities and give them new information (making the project seem somewhat unreliable). For the next campaign, the project recommends that each donor procure the nets needed for its own zone.

For this campaign, the project had four main lines of transport for the LLINs, following the national logistics plan. The first line was from Conakry to five prefectures in Boké Region. The second was from Conakry to three prefectures in Kindia covered by the project. The third line was from Mamou to Dinguiraye, and the fourth was from Labé to the four prefectures of the region. Following these lines and based on the results of the enumeration, the project developed a logistics plan. This plan determined the quantity of LLINs to be transported by distribution site, health center, and prefecture and aligned those numbers with the number of trucks and the terms for delivery of the total quantity. The project planned to deliver to all sites at least 24 hours before the start of the distribution. As was done in 2013, *StopPalu* did not store LLINs at the regional level to avoid the risk of loss and additional costs. The project transported LLINs directly to the prefectural level. In each prefecture, the project worked with the mayors and prefects to obtain free warehouses that complied with health and safety standards. In the prefecture of Boké, however, two warehouses had to be rented in the sub-prefectures of Kamsar and Sangaredi. These cities have mining companies and a large population. Each warehouse was provided with a large padlock. In the prefectures where the security was uncertain, the project contracted two security guards to safeguard the warehouses.

To ensure proper monitoring of LLINs in each prefecture, the project trained two warehouse managers per warehouse on health, safety measures, and the use of management tools. These managers were the DPS pharmacist and a facilitator from *StopPalu's* NGO partner working in the specific prefecture. In some prefectures or towns where the project had more than one warehouse, two managers were trained for each additional warehouse.

To transport the LLINs, *StopPalu* selected a transport company using a competitive process and worked with the selected company to ensure health and safety measures for both transport and storage. The project developed and used stock management tools—each truck driver had a delivery sheet completed at the departure and countersigned upon receipt. The transport company was paid after the project received the delivery sheets. The project also prioritized transporting and pre-positioning LLINs to the prefectures most difficult to access—for example Gaoual and Koundara in the region of Boké, and Mali and Tougué in Labé. This strategy was very helpful for the project, especially with the delay in the delivery of nets from the port. Once these nets were released from customs, the project transported them directly to the remaining prefectures that were closer.

Based on the logistics plan, LLINs were transported from Conakry warehouses to the 14 prefectures. The transfer of the LLINs from the prefecture warehouses to the distribution sites was less challenging this year than it was in 2013. This year it was easier to come to an agreement with local transporters. The project team has built better relationship with the authorities and the transporters' union in most of the prefectures. The exception was the transporters' union in the prefectures of Dinguiraye and Gaoual, where union members maintained uniformly high prices.

Another challenge was poor road quality, especially during the rainy season, in some prefectures such as Dinguiraye, Gaoual, Mali, and Tougué. Many carriers refused to go to

these sites. As was done in 2013, the project had to contract carriers from Labé to transport the nets to some sites in the Mali, Lélouma, and Tougué prefectures. The project received important support in most of these prefectures from the local officials, who were involved and helped organize transport. In these cases, *StopPalu* applied the same management tools to ensure proper monitoring of the LLIN transportation.

When the campaign distribution phase was completed, and as recommended this year by the NCC, the project staff transported the remaining nets from the distribution sites to the health centers so that these nets can be used for routine LLIN distribution. The project required that staff properly fill out all forms concerning the remaining nets that were returned to each health center, and have the heads of the facilities sign the forms.

LLIN transportation

Activity 1.1.1.10 Distribute LLINs to the population, in collaboration with health centers, CSHs, civil society organizations, and NGO partners. Following the distribution strategy defined by the NCC, *StopPalu* used fixed distribution sites to distribute 2,342,154 LLINs in the 14 prefectures and 828,532 LLINs in Conakry. As in 2013, the procedure was for household representatives to receive their LLINs at the distribution sites upon presentation of their vouchers.

Based on the results of the micro-planning and enumeration, the project implemented 560 distribution sites in the 14 prefectures and 210 sites in the five communes of Conakry. The approach to determine the number of distribution sites was calculated on the basis of serving 150 households per day in rural areas and 300 households per day in urban areas. Due to the distances between some villages and the distribution sites, the project, in collaboration with local officials, established sub-distribution sites for two or three days. The activities in these sub-sites were conducted by the trained team of distributors who worked at the official distribution site. When the team finished serving all households at the official site, they went to sub-sites and served the remaining households. This strategy was very useful and helped increase the number of households that received nets.

Distribution sites were organized to facilitate crowd management. Two days before the distribution phase began, all distribution sites received the necessary materials such as the booklet of distributed vouchers; the enumeration summary form; the distribution sheets; the distribution site summary form; the distribution site waste management daily form; tee-shirts, hats, gloves, and a medical face mask for the person in charge of handling the LLINs; scissors; BCC messaging tools; etc. The distribution agents always removed the nets from the cellophane bags before giving them to the population, and the bags were kept at the sites. This was done to reduce the risk of beneficiaries trying to sell the new nets and also to

ensure proper waste disposal. Each distribution site had a team of five volunteers who managed the following activities:

- Hanging demonstration, promoting proper use and maintenance of LLINs, and delivering key messages (one person): This volunteer explained how to use the nets and the importance of hanging them outside in the shade for two days to reduce potential side effects of the insecticide. He/she also delivered key messages on how to hang nets, depending on whether the net was rectangular or round, and how to wash and repair the LLIN.
- Crowd organization and management (one person): This volunteer placed people in one or two lines (men and women) per order of arrival.
- Voucher verification (one person): This volunteer matched the participants' voucher copies with the project's original voucher copy, based on the voucher number, and compared information on the copies (name of household representative and number of LLINs to be provided).
- Open packaging and distribution of nets (one person): This volunteer opened the plastic bags, extricated the nets from the bags, distributed the nets to household representatives, and managed the stock of nets.
- Tracking number of nets provided (one person): This volunteer completed forms according to number and shape (rectangular or round) of nets provided and collected each voucher after the nets were distributed.

Based on the 2013 experience, the sites chosen in 2016 were much better adapted to welcoming and managing the crowd. One innovation for this year was that at each site, the team demonstrated the hanging of one rectangular net and one circular net. This made it easier for the agent in charge of social mobilization to explain to the community members how to hang and use both types of nets, and also how to transform the rectangular net to a circular one. To facilitate the verification of coupons, teams ranked them according to the numbers or the villages. This reduced the waiting time in line.

The waste disposal activity was carried out in the presence of the sub-prefecture supervisor to confirm proper disposal. The project's distribution team worked with local officials to identify a site and dig a hole at each distribution site where the cellophane bags would be incinerated at the end of every distribution day.

Voucher verification at a distribution site

The two types of nets (rectangular and circular) displayed at a distribution site

The distribution activities began in 11 of the 14 prefectures on May 25, 2016. In the three prefectures in the Kindia region, distribution activities started on May 27 due to the transport issue. A national ceremony hosted by the Kindia Prefecture launched the distribution activities on May 11. The NMCP, with the support of all the partners involved in malaria control activities, organized this ceremony. First Lady Mme. Hadja Djene Condé presided over the ceremony. Notable attendees also included the Kindia Region Governor, the US Ambassador, the Global Fund portfolio manager for Guinea, the USAID Health Team leader, the PMI Senior Advisor in Guinea, and representatives from international and national NGOs working in Guinea.

The launch ceremony was combined with the celebration of World Malaria Day. The ceremony was used as an opportunity to mobilize the population of the city of Kindia and authorities at regional and local levels. Many local health professionals, students, women's groups, religious leaders, and elders were in attendance. The ceremony began with a procession; followed by theater performances; and then speeches by WHO representative, Mrs. Gouvernor, the GFATM representative, and the US Ambassador. Finally the First Lady officially launched distribution operations, handing nets out to some of the household representatives present at the ceremony. The artists who had composed the song "Let's sleep under LLINs" (the second version) performed it for the first time at the launch ceremony, inspiring many of the guests to dance to the song. Artists also conveyed messages in local languages to promote the use of LLINs.

Launch ceremonies in Boké and Coyah

The 2016 distribution took place under challenging circumstances due to the rainy season, agricultural activities, and, especially, the month of Ramadan. The project used multiple strategies to ensure that households came to receive their LLINs. After the first day, the project team noticed that only children and youth were coming to receive the nets because the parents were busy with other activities. They also noticed that rural populations were coming later in the day—near the closing time for the sites after working in the fields—especially in the Labé Region. Therefore, the project decided to keep those distribution sites open until after 6 p.m. (the sites were supposed to close at 5 p.m. at the latest). *StopPalu* also asked distribution agents to be proactive if they noticed that not many people were coming to the site; rather than all five agents sitting at the distribution site to wait for household representatives to arrive, the two agents who were responsible for social mobilization and crowd management would go to the households that had not yet been served and encourage them to come pick up their nets. These agents also took that opportunity to explain to those who had lost their vouchers that they could still come to the site and receive LLINs. They also explained that those whose heads of households did not

have time to come to the site could be represented by another member of the family with the coupon and the necessary information (name of the head of household and name of the head's mother). Note that in 2013, the presence of the head of household was required except when she/he was traveling, and this information had to be confirmed by the head of the village or the sector. But this year, given the situation, teams were more flexible. This approach allowed the project teams to serve all households around the distribution sites in two days and made it easier to move the teams to another place where people had not yet been served.

In addition to the sub-distribution sites, the teams set up mobile site distribution. With the tracking of daily distribution data, the teams knew which villages or households were not picking up their nets. The teams took those vouchers books and the nets to these villages and distributed nets to these households. In some villages, households had their nets distributed in the fields.

It is important to mention that some CHWs and members of CSHs were very helpful. In some villages, they conducted several door-to-door visits and took the vouchers from the households they knew (and that for some reason could not go to distribution site), picked up their nets, and brought the nets back to their home.

During the interactive radio programs, households said they did not come to collect their nets because the nets were rectangular. The project conducted communication activities through field agents and media to explain how easy it is to transform a rectangular net into a circular one, and more people began to come to the sites. Also note that the quality (material and size) of the LLINs purchased this year was highly appreciated by the people. The fabric was soft and the nets are large. The project team therefore increased communication activities in the mosques, public places, radio stations, and other media to encourage people to pick up their nets, emphasizing the LLIN transformation process.

The local authorities in the villages and sectors that had the lowest coverage rates were informed daily. With their support, distribution teams were divided and moved to these areas to serve more households. Using these strategies, after five days of distribution, most of the prefectures had distributed more than 85% of LLINs. To reach 90% coverage (*StopPalu*'s goal), the project worked with local authorities, DPSs, and DRSs so that teams could continue to serve households for two more days at no additional cost. Thus in 14 prefectures, after the two additional days, 2,342,154 LLINs were distributed (93% of the planned quantity).

LLIN distribution in the 14 prefectures

The distribution in Conakry experienced the same challenges as in the prefectures, in addition to the long period that had passed between enumeration and distribution. With the passage of time, many households had lost their vouchers and refused to come to the sites for fear of being turned away. *StopPalu* told the *chefs de quartier* and the distribution agents to inform people that they could receive their nets even if they had lost their coupons. Mobile caravans also played a big role in the dissemination of this information. Added to the other challenges, the project received many vouchers with the writing washed out by the rains. This required a lot of time from the teams to find the original copies and identify the number of nets to be distributed. As in prefectures, distribution teams were divided to serve mobile sites in areas where populations did not have time to go to a site that was far from their homes. To serve the households living in apartment buildings for example, the project moved the teams near these buildings for one or two days.

Also note that for the distribution in Conakry, there were two forms of nets—the rectangular ones procured by PMI and GFATM and the circular ones procured by OMVS. To avoid the problem of some communes having one form and the other communes having another form (and since the quantities of both forms were almost equal), the project decided to send the same quantity of both forms to each commune. However, the fabric of the circular nets was not soft and the population did not like them.

LLIN distribution in Conakry

Note that areas with household members who worked in retail or service professions (shopkeepers, hairdressers, tailors, etc.) found it easier to come to the site to pick up their nets than family members working in offices. People from residential neighborhoods were the last to pick up their nets.

Despite strategies to address all of these issues, after the first five days of distribution in Conakry, only the commune of Matam had more than 70% of LLINs distributed. Some communes, such as Ratoma, had 64%. It is important to mention that this year, in contrast to 2013, *StopPalu* did not notice important cases of fraud. The only cases that the project observed were households that received their nets without vouchers because they said they had lost their vouchers. After they received their nets, another representative of the household came back with their coupons to be served. However, because the original voucher had been crossed through, the team was able to show the second family members that that their household had already been served. This happened in some health facilities as well.

The project also found some cases where households changed the number of LLINs registered on their voucher, either by replacing a figure by another or by adding a number to the true figure. However, the team easily discovered these cases. Before serving a person, the distributors verified the authenticity of the voucher and the original data. All these cases were detected thanks to the vigilance of the distribution teams and the supervisors.

At the end of every distribution day, the team counted the empty plastic bags and completed the waste disposal forms; then, in the presence of the supervisor, the bags were incinerated in the hole dug for this purpose. In the urban areas and Conakry, the plastic bags were collected by the supervisors and project team then sent to the hospitals or health centers where incinerators were available for proper disposal.

Transporting and incinerating the waste at the end of the day

After the five days of distribution, the project decided to stop campaign activities until after the Ramadan holiday, despite the request of neighborhood leaders to continue the distribution for a few days. This decision was made because the project expected that people would not come to the sites during the Ramadan holiday, and there was no reason to pay the distribution agents for these days. Before re-opening the sites, the project informed the population and the local authorities.

After the holiday, the project organized five meetings (one per commune) to present the distribution results to the mayors and *chefs de quartier*. During these meetings, the project team and NMCP representatives presented the data by district, sector, and square so that local officials could see areas where there were problems. The project team and local authorities decided together what action to take to increase the number of nets distributed and correctly used. During these meetings, which were chaired by the mayors, elected representatives asked the project and the NMCP to continue distributing another two days so that households that had not yet received their nets could do so. They also requested to be paid for any communication they would carry out to inform their communities about the new distribution dates and to promote the communities' participation.

After the meetings, it was decided that the sites would continue to operate a few more days, and each neighborhood leader would inform his community. Some neighborhood leaders promised to be present at the sites to track distribution activities. To avoid additional costs, the project proposed to use the five days of post-distribution visits to operate the distribution sites. Because the project had at least 11 enumerators around each site and these agents were already lined up to carry out post-delivery visits, *StopPalu* decided to keep two agents at each site and the rest of the agents conducted post-distribution visits.

During door-to-door visits, the agents asked all households who had not received their nets to go to the sites to pick up their nets. In some places, supervisors collected several unserved vouchers from households in different areas, then they transported LLINs on their bikes to bring them to these households. This innovation allowed the project to serve more households. After the meeting on the results of the first distribution, the local authorities became very involved in the campaign. Also, at the request of *chefs de quartier* and based on the enumeration count sheets, distribution teams made a list of households in their neighborhoods that did not retrieve their nets, and the *chefs de quartier* brought a representative from those households to the distribution site. Thanks to these strategies, the project distributed 1,028,413 LLINs (91 % of the planned quantity).

Tables 15 and 16 summarize LLIN distribution activities in the prefectures and communes of Conakry.

Table 15: Summary of distribution activities in the 14 prefectures

PREFECTURES	Enumerated households	Households served	No. of LLINs planned	No. of LLINs distributed	Coverage rate for households served	Coverage rate for LLINs distributed
Labé	70535	55599	279350	250240	79%	90%
Lélouma	33165	30294	124877	118199	91%	95%
Koubia	15741	14561	68161	63661	93%	93%
Mali	46501	40263	172046	157545	87%	92%
Tougué	19703	17542	92840	87100	89%	94%
Dinguiraye	36078	32294	170518	157130	90%	92%
Boké	105920	90901	423251	388989	86%	92%
Boffa	39997	37750	173834	154679	94%	89%
Fria	15710	14321	84520	82780	91%	98%
Gaoual	29374	26444	144182	133582	90%	93%
Koundara	19122	19127	93338	90363	100%	97%
Forécariah	53017	49158	240551	230597	93%	96%
Dubréka	63575	59521	277820	263091	94%	95%
Coyah	48884	44581	180620	164198	91%	91%
TOTAL	**597322**	**532356**	**2525908**	**2342154**	**89%**	**93%**

Table 16: Summary of distribution activities in the five communes of Conakry

COMMUNES	Enumerated households	Households served	No. of LLINs planned	No. of LLINs distributed	Coverage rate for households served	Coverage rate for LLINs distributed
Dixinn	39338	32062	113135	98452	82%	87%
Kaloum	15274	14838	49500	48907	97%	99%
Matoto	117180	102865	421976	389285	88%	92%
Matam	37558	34121	108267	98818	91%	91%
Ratoma	142308	117649	440091	392951	83%	89%
TOTAL	**351658**	**301535**	**1132969**	**1028413**	**86%**	**91%**

Activity 1.1.1.11 Support supervision activities. For the distribution phase, the project used a supervisory system at each level as for the other phases. At the sub-prefecture level, health center heads and NGO field agents served as supervisors. One supervisor oversaw two sites—at the prefectural level, project staff and three people per DPS served as supervisors, and at the regional level three people per DRS performed this role. The supervisory system was set up so that each site was supervised at least once every day. As was done in 2013, the Minister of Health sent two national directors to each region to supervise the distribution. Having MOH supervisors demonstrated to the health authorities in regions, prefectures, and sub-prefectures that the campaign is an MOH activity—not only a *StopPalu* and NMCP activity—and so all health authorities should do all they can to make it a success. These supervisors increased the involvement of authorities at all levels. All the supervisors were trained and equipped with adequate tools for effective supervision. The project also developed and used tools that helped ensure that all supervisors carried out their role effectively. Supervision was conducted at health facilities, distribution points, and community levels. These different levels of supervision helped correct errors and mistakes, improved the quality of data, and also reduced the risk of fraud.

As was done during the enumeration phase, the supervisor and distributors met at the end of each distribution day to verify data, discuss results (such as number of households that received their nets compared with the expected number), verify the LLIN stock, and discuss strategies to increase site attendance or to bring the nets closer to households. At the end of these very useful meetings, the teams proposed solutions to solve issues. Many of the solutions were related to communication activities, such as organizing interactive radio programs to better understand the barriers that stop people from coming to the distribution sites; conducting mobile caravans; and disseminating distribution messages through various channels such as religious leaders, mass media, women and youth associations' leaders, etc.

1.1.1.12 Conduct post-campaign awareness-raising. This activity was very useful for the success of the campaign and especially for the proper use of distributed LLINs. Following the distribution of LLINs, as planned in the national mass distribution action plan, the same persons who conducted the household enumeration visits revisited the households over the course of five days to encourage people to hang, use, and maintain nets properly. The objective was to visit at least 50% of the households that were visited during enumeration since the post-distribution days were half as many as the enumeration days. The expectation was that by visiting some households, the rest will follow suit and properly hang and use their nets.

During the visits, some households had not aired their LLINs and kept them as they had received them from the distribution sites. Households said they had not had time, or they did not have the materials for hanging rectangular nets, and many said that since that they still had circular LLINs from the 2013 campaign, they preferred to keep them. The teams asked households that had not aired the nets to do so and then hang them. The teams promised to follow up after two days to verify if households had hung their nets. For households that still had their nets airing, the teams requested that the households hang them. The teams helped those who had difficulty hanging their nets. The teams and supervisors were really surprised by the way people quickly understood the transformation process and how, in less than two minutes, they were able to transform the rectangular nets into a circular form. For households that already had nets, teams asked whether they were from the 2013 campaign, and if the response was yes, they had the household replace them with new nets from this year. If the household had received the nets during the previous year, through routine distribution, teams asked them to keep the nets and replace them next year (or if the nets get a hole). The agents also used these visits to further stress the importance of correct and

consistent use of LLINs, even during the day and for the whole family. During home visits, they found many household in which mosquito nets were hung but not lowered, and children were sleeping without mosquito nets. The parents said that because it was daytime, they did not lower the nets. Although the objective of this activity was to raise awareness on the use of LLINs, in many households the teams also helped to hang the nets. It is important to note that even though all the LLINs distributed in the prefectures were rectangular, more than 75% of the households that were visited were using them in a circular form. The few households that used them in a rectangular form changed them into a circular form when the team explained to them how to transform the nets.



Post-distribution visits

To facilitate the collection of data on the number of LLINs hung by the teams and the number of people reached, tools were produced and made available to officials throughout the duration of the activity. For Conakry, it was thought that people were not going to welcome the post-distribution visits, but it was the opposite—no households turned the teams away. They even liked the fact that the teams verified the actual use of the LLINs. Note that during the distribution, the teams had promised to follow up on the use of the mosquito nets. The officers had even said they would collect all LLINs that were not used. During this activity, the project was able to visit and help 415,649 households to hang 454,345 LLINs, and they reached 1,773,498 people with key messages on correct and regular net use in the 14 prefectures. In Conakry, these teams visited 177,173 households to hang 304,700 LLINs and reached 1,195,495 people. Due to the importance of this activity, we strongly recommend it be included in the next campaign.

Activity 2. Plan and implement information, education, and communication (IEC)/BCC campaigns for LLIN uptake and proper use.

Activity 1.1.2.1 Train civil society organizations/community-based organizations, and CHWs in interpersonal communication (IPC) techniques and new messages developed based on the Knowledge, Attitudes, and Practices (KAP) Survey. During the first quarter, *StopPalu* worked with the DPSs to train 55 new CHWs in Dubréka and Forécariah on malaria community case management. The training included IPC techniques and new messages developed based on the new Malaria Control Communication Plan. The newly trained CHWs and the previously established CHWs conducted household visits to disseminate these messages. The messages promote healthy behaviors such as the correct and regular use of LLINs, ANC visits for pregnant women, and early care-seeking in case of fever. During the visits, the CHWs verified whether the nets received by the households were hung and helped hang the nets if they were not. They also encouraged pregnant women and mothers of children less than 12 months old to go to the health center for ANC and EPI visits, where they would receive a free net. The CHWs explained the signs of malaria and promoted early care-seeking practices as soon as malaria symptoms are noticed.

- For the first quarter, the CHWs conducted 38,877 home visits and reached 348,987 people.
- During the second quarter, *StopPalu* worked with the DPSs to train 335 new CHWs and 16 NGO field agents in the regions of Boké and Labé, and the prefectures of Coyah and Dinguiraye on malaria community case management. The newly trained CHWs and the previously established CHWs conducted household visits to disseminate these messages. (It is important to mention that the malaria activities conducted by the CHWs were reduced during that quarter due to conflicting scheduling from the three immunization campaigns and the various trainings on surveillance.) The CHWs conducted 30,968 home visits and reached 213,527 people.
- During the third quarter, *StopPalu*-trained CHWs conducted 35,555 home visits and reached 330,289 people.
- During the fourth quarter, The CHWs conducted 55,212 home visits and reached 476,395 people.

During FY 2016, the 1,310 trained CHWs in the regions of Boké, Conakry, Kindia, and Labé conducted 160,612 home visits and were able to reach 1,369,198 people, of whom 776,004 were women (see ***Tables 17 and 18***).

Table 17: Number of home visits conducted by CHWs in FY 2016

	Year 3 Oct 2015 – Sep 2016				
	Q1	Q2	Q3	Q4	
Prefectures	Oct 2015 – Dec 2015	Jan 2016 – Mar 2016	Apr 2016 – Jun 2016	Jul 2016 – Sep 2016	TOTAL
Boffa	3648	1022	1465	5160	11295
Boké	5400	780	3555	7824	17559
Coyah	2385	3168	3432	3288	12273
Conakry	0	0	0	0	0
Dinguiraye	1320	1328	1728	1920	6296
Dubréka	3983	4914	4843	5326	19066
Forécariah	4937	6996	7044	7056	26033
Fria	2454	1713	1225	3083	8475
Gaoual	2964	720	623	4889	9196
Koubia	916	1093	1212	2012	5233
Koundara	3407	420	2196	4498	10521
Labé	2672	1437	3200	3624	10933
Lélouma	1584	1290	1616	1984	6474
Mali	1863	4883	1757	2372	10875
Tougué	1344	1204	1659	2176	6383
Total	**38877**	**30968**	**35555**	**55212**	**160612**

Table 18: Number of people reached by the CHWs in FY 2016

	Year 3 Oct 2014 – Sep 2015				
	Q1	Q2	Q3	Q4	
Prefectures	Oct 2014 – Dec 2014	Jan 2015 – Mar 2015	Apr 2015 – Jun 2015	Jul 2015 – Sep 2015	TOTAL
Boffa	20832	1591	8137	26049	56609
Boké	37574	1008	18507	53099	110188
Conakry	0	0	0	0	0
Coyah	14166	18462	19688	19579	71895
Dinguiraye	35030	28998	45812	42663	152503
Dubréka	20712	24977	26093	28905	100687
Forécariah	26519	39405	37794	37923	141641
Fria	14755	1918	7292	19796	43761
Gaoual	20868	818	6985	31261	59932
Koubia	14899	15193	17394	22299	79221
Koundara	20116	637	9481	31735	52533
Labé	43189	26962	51962	52351	174464
Lélouma	24740	20497	21677	32049	98963
Mali	32584	13779	32061	40791	119215
Tougué	23003	19282	27406	37895	107586
Total	**348987**	**213527**	**330289**	**476395**	**1369198**

Discussion Groups Facilitated by Project's NGO Partners

To increase people's level of knowledge on malaria and promote the practice of healthy behaviors related to malaria prevention and treatment, the NGO facilitators conducted group discussions. These discussions took place in health centers and public places such as soccer fields, market places, hairdressing salons, and sewing salons. During FY 2016, these activities focused on promoting community participation in the LLIN mass distribution campaign and the correct and regular use of nets as the best way to prevent malaria. The facilitators also emphasized the importance of using health facilities. During these activities, facilitators tried to identify barriers that prevent communities from using nets or health facilities. For each barrier, facilitators shared some solutions to overcome them. They emphasized the efficacy of these products and services and their availability at no cost. During FY 2016, 2,186 group discussions were held, reaching 30,694 people (16,733 women).

Activity 1.1.2.2 Train health staff at regional and prefectural levels to support CHWs' messaging activities and to incorporate LLIN IEC/BCC into facility services. The project team, in collaboration with the NMCP and the DPSs/DCSs, trained 200 new health facility staff in Conakry during the first quarter, and 231 new health facility staff during the second quarter. The training focused on malaria case management, including new messages on LLIN access and use. In addition, it emphasized the importance of reminding the patients to continuously use LLINs as a means to prevent malaria.

Activity 1.1.2.3 Plan LLIN prevention messaging through mass media. During the first quarter, the project broadcast 1,193 radio spots and 170 television spots on routine LLIN distribution and artemisinin-based combination therapy (ACT) use. To promote correct and regular use of nets and routine LLIN distribution, the project organized 11 roundtables and

13 interactive (call-in) radio programs in the regions of Boké and Labé. For each roundtable, representatives from DPSs, CSHs, media, and NGOs participated, sharing information on the importance of LLIN use in malaria prevention and the availability of nets in the health centers at no cost for pregnant women and children less than a year old. The participants also explained the danger of complicated malaria and the necessity to prevent it. During the second quarter, the project broadcast 768 radio spots and 144 television spots on routine LLIN distribution and ACT use. To promote correct and regular use of nets and ANC visits, the project produced a calendar in January 2016, with the new validated messages. The calendars were distributed in all the health facilities, DRSs/DPSs/DCSs, and to CHWs supported by the project. During the third quarter, the project broadcast 1,524 radio spots and 116 television spots on correct and regular LLIN use and ACT use. During the fourth quarter, the project broadcast 1119 radio spots and 83 television spots on correct and regular LLIN use, 1,446 radio spots and 137 television spots on how to transform rectangular nets into circular ones; and 992 radio spots and 20 television spots on ACT use and availability at no cost. In order to reach more people and increase people's knowledge about malaria, the project also conducted 11 round tables and 10 interactive programs in prefectures that had a high incidence rate according to their health centers' malaria report forms. During these programs, radio listeners were able to call in and ask questions or share concerns and ideas.

The roundtable at the radio station in Fria

The roundtable at the radio station of Dubréka

1.1.2.3 Advocacy/BCC/governance: Strengthen the capacities of community leaders and CSH members on advocacy. To increase community participation in malaria control activities and improve collaboration between health center staff and communities, during FY 2016 *StopPalu* trained 217 CSH members from the prefecture of Forécariah and the region of Boké on their roles and responsibilities in health center management as well as on advocacy techniques. The project also supported them in advocacy planning. The specific objectives of the training were as follows:

1. Recall the principles of primary health care in decentralization and local development.
2. Describe the mission and tasks of the CSH members.
3. Train the CSH members on health center resource management.
4. Describe the role of CSHs in improving quality of services.
5. Train CSH members in advocacy techniques.


Training for CSH members in Forécariah and Fria

At the end of the training, each CSH developed an advocacy action plan based on health priorities, and the NGO partners' field agents provide ongoing support and monitoring for the implementation of those plans. The participants committed to become more involved in the management of health centers. CSHs played an important role in the implementation of the LLIN mass distribution campaign. They supervised the enumeration and distribution agents and also promoted the population's participation in the campaign.

1.1.2.5 Train CSH's in the management of health centers by using the validated manual developed by the Directorate for Prevention and Community Health. To enable CSH members to better perform their roles in support of health centers, *StopPalu* trained 217 new CSH members in the prefecture of Forécariah and the region of Boké on health center management. These trainings improved CSH members' capacity to monitor the services provided in the health centers and promote the community's use of these services. The project also encouraged CSH members to participate in the monthly meetings held at the health center level to help them better understand the results and challenges that health centers face. The project team encouraged CSHs to organize meetings with the community to inform them about health center activities and challenges. The project also used these trainings as an opportunity to encourage CSH participation in the LLIN mass distribution campaign.

Activity 3. Support routine LLIN distribution in health facilities.

Activity 1.1.3.1 Provide focused support to increase LLIN availability and distribution at ANC and EPI services. During FY 2016, *StopPalu* continued to support the NMCP to implement the routine LLIN distribution strategy in 152 public and 27 private facilities, and 5 communal medical centers (CMCs) in the project-supported prefectures and communes. A total of 214,138 LLINs were distributed through this strategy. To implement the routine strategy, *StopPalu* conducted the following activities:

Transport/storage: During FY 2016, *StopPalu* ensured the transport of LLINs to the health facilities and DPSs that were almost out of stock. In total, the project transported 45,500 LLINs to 12 health facilities in Conakry, the Maferinyah health center, and the DPSs of Boffa and Forécariah. Most of the remaining nets from the LLIN mass distribution campaign were also transported to the health facilities to be used for routine distribution.

Communication and social mobilization: *StopPalu* continued to broadcast radio and television spots to promote ANC visits and the use and proper maintenance of LLINs. CHWs disseminated key messages on routine distribution and LLIN use during household visits.

Supervision of routine LLIN distribution: In FY 2016, *StopPalu* supported the 19 DPSs/DCSs to supervise malaria control activities, including routine LLIN distribution in health centers. The routine LLIN distribution activity is integrated in the NMCP's supervision guide. The project team also conducted several supervision exercises to assess the quality of malaria control activities, including the routine LLIN distribution.

- **Challenges and Specific Measures Used/Planned to Overcome Them**

Beneficiaries' acceptance of rectangular LLINs is one of the major challenges encountered during routine distribution activities; most beneficiaries prefer the round circular forms. To address this challenge, *StopPalu*, through its NGO partners and community-based organizations, will intensify communication activities within communities to inform them on how to transform the rectangular LLINs to circular and to emphasize the fact that both forms are useful to prevent malaria. These messages have been included in the new storyboard issued for IPC activities.

3.1.2 Sub-result 1.2: IPTp uptake increased

- **General Objective**

To increase intermittent preventive treatment of malaria in pregnancy (IPTp) uptake, the project ensures that standards-based IPTp policies and protocols are integrated into clinical case management guidelines and responsibilities at each level of the service continuum, with coordinated rollout to public- and private-sector service sites, supported by training materials and job aids for supervision.

- **Specific Activities and Results**

During the reporting period, *StopPalu* implemented the following activities:

Activity 1. Work with the NMCP and key stakeholders (e.g., PMI, WHO, UNICEF, universities, medical schools, and other partners) to conduct a thorough review of national policies, guidelines, and protocols; training materials; and management tools and job aids for the prevention and treatment of malaria in pregnancy, including IEC/BCC materials, standards-based quality assurance, supportive supervision guidelines, and M&E measures.

1.2.1.1 Revise the ANC data collection tools at the health facility level to include the new malaria in pregnancy policy. This activity could not be implemented in FY 2016 because of changes to the management team in the MOH Office of Strategy and Development (*Bureau Strategie et Developpement*). The new team needed to develop and validate the new strategic plan and the list of national health indicators to be monitored before the revision of data collection tools. The revision of data collection tools is planned for the second week of November 2016.

Activity 2. Develop a comprehensive FY 2016 IPTp training plan for nurses and midwives in public, private, and NGO/faith-based organization facilities providing sulfadoxine/pyrimethamine (SP) in PMI zones.

Activity 1.2.2.1 Train/update ANC staff and new CHWs on the prevention of malaria in pregnancy and on referral of malaria cases during pregnancy. During the first quarter of FY 2016, the project, in collaboration with DPSs, trained 231 health staff members on malaria prevention and treatment, including IPTp. The project also trained 55 new CHWs to deliver targeted messages dealing with ANC (e.g., LLIN use, sanitation, and early care-seeking) and IPTp. To ensure that patients take SP during ANC visits, *StopPalu* continued to provide

necessary supplies, such as cups and buckets for water, to private and public health centers that were out of stock.

During the second quarter, the project, in collaboration with DPSs, conducted onsite training for 200 health facility staff in Conakry on malaria prevention and treatment, including IPTp. During these trainings, the trainers explained that after the 13th week of pregnancy, woman must have one dose of SP at each ANC visit until delivery, with one-month intervals between doses. They also noted the importance of IPTp uptake under direct supervision. The project team asked the providers to always remind pregnant women to correctly and regularly sleep under a bed net. Furthermore, the project trained 335 new CHWs to deliver targeted messages dealing with ANC and IPTp.

During the fourth quarter, to improve the IPTp, the project trained 453 new ANC staff members on IPTp (***Table 19***). These trainings aimed to prepare ANC staff to educate and advise women on how to prevent malaria during pregnancy and to correctly administer IPTp in the context of a focused antenatal approach.

Participants in during group work

Participants in Dubréka implementing a role-play

Table 19: Number of new ANC staff members trained in FY 2016

Prefectures	Participants		
	Men	Women	Total
Boffa	9	20	29
Conakry	0	31	31
Coyah	0	22	22
Dubréka	20	20	40
Forécariah	17	23	40
Fria	7	19	26
Gaoual	15	12	27
Koubia	11	10	21
Koundara	12	16	28
Labé	17	40	57
Lélouma	20	16	36
Mali	27	14	41
Tougué	15	13	28
Dinguiraye	14	13	27
Total	**184**	**269**	**453**

Activity 1.2.2.2 Implement BCC activities to promote the use of ANC services. Based on the new NMCP communication plan, *StopPalu* used both IPC and mass media to promote ANC clinic attendance and educate pregnant women and communities on the benefits of IPTp. During FY 2016, *StopPalu* broadcast 1510 radio and 205 television spots that promoted ANC clinic attendance and routine distribution. To increase ANC clinic attendance, the project, through its NGO partners, organized social mobilization events targeting women's and young girls' associations to increase this population segment's knowledge about malaria and pregnancy and the importance of ANC visits for both mothers and their babies.

Activity 1.2.2.3 Equip CHWs with IEC materials and data collection tools to increase their motivation and facilitate their work. To support the 1,310 project-trained CHWs better perform their duties, *StopPalu* provided CHWs with IEC materials, data collection tools, boots, raincoats, and bags. To facilitate the transport of CHWs, the project also procured bicycles for 650 new CHWs.

Activity 3. Introduce standards-based management–recognition (SBM-R) techniques to strengthen ties between health facilities and communities for IPTp quality assurance and impact.

Activity 1.2.3.1 Meet with PMI, NMCP, and MOH representatives at prefecture, district, and regional levels to determine terms of reference for SBM-R malaria activities. From June 16 to 19, 2016, the project, in collaboration with the NMCP, organized a workshop to develop performance standards for malaria prevention in pregnancy and case management. NMCP staff; representatives from the DRSs of Boké, Conakry, Kindia, and Labé; health providers; national trainers; and *StopPalu* staff attended the workshop. During the workshop, participants were divided into three groups. Each group had to define the standards for the different domains of the fight against malaria: prevention during pregnancy, diagnosis and treatment, and M&E. Using the national malaria control policy, case management protocols, and the supervision grid, each group established a list of standards. After two days of group work, the groups presented their results. Standards were presented by domain, and participants amended them. In total, 50 standards were developed for malaria in pregnancy and 40 for malaria case management. At the end of the workshop, participants suggested that at the end of the LLIN mass distribution campaign the following activities should be carried out:

- Share the standards with other NMCP TWGs
- Hold a national validation workshop for the standards
- Work with the NMCP to select pilot sites
- Begin implementation of SBM-R techniques

StopPalu plans to begin the implementation of SBM-R techniques in FY 2017.

Activity 4. Integrate IPT into other maternal and child health service delivery and protocols.

Activity 1.2.4.2 Strengthen the relationship between the health centers and CHWs through monthly supportive supervision together with outreach strategies and monthly coordination meetings. To improve the relationship between the health facilities and communities (CHWs and CSHs), *StopPalu* continued to support, through its NGO partners, the organization of monthly monitoring and coordination meetings at each health center between the first and the fifth day of each month. These meetings involved all facility staff implementing malaria prevention or treatment, at least two members of the CSH, 10 CHWs trained in clinical case management, and one NGO field agent. During these meetings, the malaria monthly reports were presented, amended, and validated, including community data. The next month's work plan was also validated.

- **Challenges and Specific Measures Used/Planned to Overcome Them**

Maintaining inventory of SP is one of the biggest challenges affecting successful IPTp. To reduce the risk of SP stocks running out, the project team will closely monitor health facilities' consumption and reporting. The project will also work closely with the NMCP and the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) project to ensure that facilities receive their orders regularly. SP uptake during ANC visits and starting administration of the medicine during the 13th week of pregnancy are also challenges for IPT activities. To ensure that SP is taken during ANC visits and that all pregnant women in their 13th week of pregnancy and beyond are getting SP, *StopPalu* will continue supervision, on-the-job training, and communication activities to inform the community about the policy.

3.2 Result 2: Diagnostic testing and malaria treatment capacity improved

3.2.1 Sub-result 2.1. Diagnostic capacity and use of diagnostic testing improved

- **General Objective**

To improve diagnostic capacity and use of diagnostic testing, our strategy integrates updated malaria diagnostic policies with standards-based, quality-assured laboratory and community diagnostic capacity building, and with tailored training for the National Institute of Public Health/National Public Health Laboratory (NIPH/NPHL), hospital laboratory staff, and CHWs. We also work with supply chain strengthening programs to mitigate shortages of diagnostic commodities.

- **Specific Activities and Results**

To ensure malaria biological diagnosis and the confirmation of all cases after the Ebola outbreak, StopPalu implemented the following primary activities:

Activity 1. Identify and introduce measures to coordinate uniform adherence to national malaria diagnostic policy, with multi-sector participation in capacity assessments and action planning for performance improvement.

During FY 2016, *StopPalu* continued to support the monthly meetings of the NMCP Diagnosis and Case Management TWG. During the period, the meetings focused on the assessment of the implementation of TWG activities and planning for the following months. The main activities discussed were the development of the national malaria quality assurance/quality control (QA/QC) manual, the refresher TOT, and training of new lab technicians.

Activity 2. With the NMCP Malaria Diagnosis and Case Management TWG, design and deliver an integrated and comprehensive program of diagnostic capacity building.

Activity 2.1.2.1 Conduct tailored training for all tiers of malaria diagnostic service.

Train new lab technicians from the health centers in Conakry.

During the first quarter of FY 2016 as part of the capacity building for laboratory technicians in biological malaria diagnosis and to improve the use of RDTs at the health center level, StopPalu, in collaboration with the NMCP, organized several technical training workshops on RDT use in Conakry. The first training targeted the 22 public health centers of Conakry, and the second training targeted the 22 private health centers of Conakry. The training sessions focused on strengthening practical skills, with limited theoretical sessions. A total of 43 lab technicians from the public centers and 18 from the private facilities were trained.

Conduct orientation on microscope maintenance for laboratory technicians.

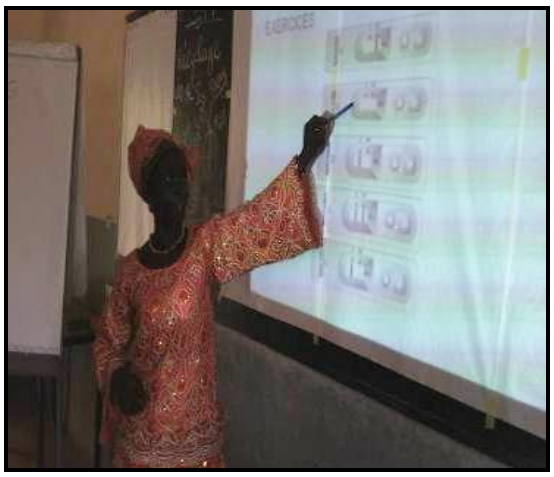
The project's laboratory technical adviser in the region of Labé oriented the lab technicians from the regional hospital of Labé on standard methods of microscope maintenance. The orientation focused on the following:

1. Microscope installation and storage
2. Microscope cleaning procedures
3. Microscope maintenance (in general)
4. Maintenance of the current microscope (laboratory-specific)

Train new healthcare providers.

During the second quarter, as part of the capacity building for health providers in biological malaria diagnosis and to improve the use of RDTs in the health facilities, *StopPalu*, in collaboration with the NMCP, conducted a refresher training on malaria case management for 453 healthcare providers in the regions of Conakry, Boké, Labé, and Kindia.

The project also trained 335 new CHWs in the regions of Boké and Labé, and the prefectures of Coyah and Dinguiraye on community case management, including RDT use (see Activity 2.2.1.1 for more detail).



Refresher training in Dubréka

Refresher training in Coyah

Train national malaria diagnosis trainers.

During June 1–7, as part of capacity building for health providers in biological malaria diagnosis and to improve malaria diagnosis in health facilities, *StopPalu* supported MalariaCare and the NMCP to conduct a refresher training for national malaria diagnostic trainers. A total of 20 participants from the regions of N'Zérékoré (4), Kankan (1), Faranah (1), Labé (3), Kindia (3), Mamou (1), Boké (4), and Conakry (3) attended the workshop.

The goals of the training were to assess and improve the trainers' level of competency on malaria microscopy diagnosis. During this refresher course, the following topics were discussed:

- The study of the morphology of *Plasmodium* species
- The distinction between artifacts and parasites
- The estimate of the parasitic load
- The preparation and coloring of thick and thin smear tests
- The use of malaria RDTs

- Fundamentals of QA and QC
- Practical review of thick/thin smear validated slides

At the end of the training, six participants were selected as national trainers and are now available to conduct all the malaria diagnosis training for the NMCP and its partners.

Refresher TOT for microscopy

Train new lab technicians on malaria diagnosis.

After a notice from the NMCP prohibited the use of microscopy for malaria diagnosis in health centers (due to concerns raised by the Ebola epidemic), the DPSs and DRSs advocated (through several actions) to train and authorize some of the large urban health centers to perform the microscopy. Because these centers serve large numbers of patients, have a laboratory, and use microscopy for other exams, it was deemed important—and logical—that they would also be able to perform malaria diagnosis through microscopy. To meet this demand, the NMCP and *StopPalu* organized this training to strengthen the skills of health center staff on microscopy and RDT use for malaria diagnosis.

During June 13–18, 2016, the project, in collaboration with the NMCP, trained 21 new lab technicians from the urban health centers and hospitals in the Boké and Kindia regions. During July 11–August 6, the project held three workshops to train 44 lab technicians from the large health centers in the Conakry and Labé regions.

Lab technician training in Boké

Conduct refresher training for previously established CHWs on RDT.

During the fourth quarter of FY 2016, the project conducted a refresher training for 620 previously established CHWs on IMNCI, including malaria case management and RDT use.

Activity 3. With the NMCP Diagnosis and Case Management TWG, design a framework to deliver an integrated and comprehensive proficiency-testing program.

Activity 2.1.3.2 Design and deliver an integrated proficiency program for microscopy and a structured quality assurance/quality control (QA/QC) program for RDTs at community levels. During the first quarter of FY 2016, *StopPalu*, in collaboration with the NMCP Diagnosis and Case Management TWG, recruited a national consultant who developed the first draft of a QA/QC manual for malaria diagnosis. During the third quarter, the national consultant reviewed the first draft with the NMCP Diagnosis TWG and made some changes. During the fourth quarter, the project recruited an international consultant who worked with the national malaria diagnosis experts to conduct a second review of the document on September 15, 2016, and make necessary changes. After the second review of the document, the international consultant facilitated a national validation workshop of the final QA/QC manual, September 19–20, 2016. The document was finalized and 225 copies were printed for distribution to all the health facilities in the project-supported zones.

Activity 2.1.2.2 Develop IEC/BCC materials and tools promoting care-seeking and diagnosis for fever at the health facility and community level. With the end of the Ebola outbreak, the NMCP called for the return to confirmatory testing of all suspected malaria cases prior to prescription of anti-malarial treatment. The project implemented several communication activities to inform the communities and households about the malaria confirmation policy and its importance in getting the best malaria treatment in a timely manner. *StopPalu* also continued to work with CSHs at health facilities and with NGOs to extend knowledge of the importance of diagnosis to families, with special attention focused on women of reproductive age and child caregivers. Information on the availability of free diagnostic services was also emphasized during this education campaign.

Activity 3. With the NMCP Diagnosis and Case Management TWG, design a framework to deliver an integrated and comprehensive proficiency testing program.

Activity 2.1.3.1 Develop microscopy slides bank. MalariaCare procured a set of slides and made them available at the NMCP for all partners. In FY 2016 *StopPalu* began using these slides to determine the performance of individual laboratories for malaria diagnosis (microscopy) and to continually monitor laboratories' performance.

Activity 2.1.3.3 Support supervision. To evaluate the performance of laboratory technicians as well as the compliance of proficiency tests performed, *StopPalu* continued the regular supervision of diagnosis activities in all regions covered by the project. For more details, please see Activity 2.2.1.2.

Other activities—microscope repair

During FY 2016, the project supported the repair of eight microscopes. In the first quarter, the project supported the repair of microscopes for the Minière and Coronthie CMCs and Ignace Deen Hospital, and in the second quarter, in the CMC in Matam. In the third quarter, the project supported the repair of four microscopes that were kept for training purposes at the Central Pharmacy of Guinea (*Pharmacie Centrale de Guinée* [PCG]). Because these microscopes were damaged, the project recommended that after the repairs, the NMCP should distribute the microscopes to health facilities where lab technicians have been trained instead of keeping them in storage (where they risk further damage), for the dual purpose of ensuring they are cared for by trained staff and put to good use between trainings. When they are needed for training, the project would be able to borrow them from the facilities and return them after the trainings.

- **Challenges and Specific Measures Used/Planned to Overcome Them**

Maintaining sufficient inventory of RDTs is the biggest challenge faced by this activity. To reduce this risk, the project team will closely monitor the facilities' consumption and reports and follow up with the NMCP and SIAPS to ensure that facilities receive their testing supply orders regularly.

3.2.2 Sub-result 2.2. Case management of uncomplicated and severe malaria improved

- **General Objective**

To improve case management of uncomplicated and severe malaria, during FY 2016 *StopPalu* focused on quality-assured supervision and on-the-job training for currently trained health staff on standards-based malaria case management, training for new health providers and new CHWs, refresher training and monitoring for previously established CHWs, and effective data collection and reporting.

- **Specific Activities and Results**

During FY 2016, *StopPalu* implemented the following primary activities:

Activity 1. Design and implement a comprehensive FY 2016 case management training plan tailored for each tier of the service continuum.

During FY 2016, *StopPalu* conducted several trainings for new CHWs and health providers on malaria case management. The project also conducted refresher training of previously established CHWs on IMNCI and provided on-the-job trainings for health facilities identified during supervision visits as needing further support.

Activity 2.2.1.1 Tailor training for facility-based staff and CHWs.

Training for CHWs

Training for new CHWs. To increase communities' access to malaria case management, in FY 2016 the project trained three additional CHWs per health center in the prefectures covered by the project. These new CHW trainings will enable the project to have 10 trained CHWs per health center. The training included RDT use, malaria case management (uncomplicated malaria), pre-referral treatment, and referral of severe cases. The CHWs were also trained on key messages to promote healthy behaviors during home visits. The trainings were supervised by DPS and DRS staff to facilitate their engagement in the implementation and monitoring of the CHWs' performance. During the first quarter, 55 CHWs were trained in Forécariah and Dubréka. During the second quarter, the project trained 335 new CHWs in the prefecture of Coyah and in the Boké and Labé regions. (***Table 20*** presents a summary of training for new CHWs.)

Table 20: Number of new CHWs trained on malaria case management

Regions	Prefecture	Participants		
		Men	Women	Total
Boké	Boké	40	2	42
	Boffa	28	1	29
	Gaoual	24	1	25
	Fria	18	1	19
	Koundara	17	4	21
Labé	Labé	23	27	50
	Lélouma	18	8	26
	Mali	29	9	38
	Koubia	14	2	16
	Tougué	23	5	28
	Dinguiraye	21	2	23
Kindia	Coyah	14	4	18
	Dubréka	21	4	25
	Forécariah	29	1	30
Total		**319**	**71**	**390**

Training of CHWs in IMNCI. During the fourth quarter of FY 2016, the project conducted a refresher training for 623 existing CHWs and trained 70 new CHWs on IMNCI including malaria case management and RDT use. A total of 693 CHWs were trained (see ***Table 21***).

Table 21: Number of CHWs benefitting from IMNCI trainings

Prefectures	Participants		
	Men	Women	Total
Boffa	36	1	37
Boké	50	10	60
Coyah	24	1	25
Dubréka	41	3	44
Forécariah	46	3	49
Fria	28	2	30
Gaoual	31	4	35
Koubia	57	3	60
Koundara	30	5	35
Labé	49	38	87
Lélouma	40	10	50
Mali	46	7	53
Tougué	40	8	48
Dinguiraye	69	11	80
Total	**587**	**106**	**693**

The CHWs trained in Forécariah

The CHWs trained in Dubréka

Community case management conducted by CHWs. Experienced and newly trained CHWs treated simple malaria cases using ACT and referred severe cases. During FY 2016, CHWs tested 97,812 people, among whom 57,811 were positive, and they treated 72,683 (see ***Table 22,23, 24***). Please note that during the first quarter of FY 2016, CHWs in some prefectures were not performing RDTs because of the Ebola outbreak. That is the reason why the number of people treated is higher than the number of positive cases.

Table 22: Details of Number of people tested by CHWs using RDTs in FY 2016

Prefectures	Number of people tested Quarter 1	Number of people tested Quarter 2	Number of people tested Quarter 3	Number of people tested Quarter 4
Boffa	0	394	223	2183
Boké	0	846	687	3004
Coyah	0	2688	820	1452
Dinguiraye	1958	1698	1887	3053
Dubréka	0	3813	1151	2796
Forécariah	0	7879	1778	3411
Fria	0	21	1055	2576
Gaoual	1224	897	596	2210
Koubia	1006	810	667	1485
Koundara	1316	534	575	4211
Labé	3667	2943	1695	3600
Lélouma	2552	1500	1153	2988
Mali	3311	1725	2429	3990
Tougué	1336	966	766	2287
Total	16370	26714	15482	39246

Table 23: Detail of number of positive cases among people tested by CHWs using RDTs in FY 2016

Prefectures	Number of positive cases Quarter 1	Number of positive cases Quarter 2	Number of positive cases Quarter 3	Number of positive cases Quarter 4
Boffa	0	46	135	1468
Boké	0	378	511	2223
Coyah	0	916	594	947
Dinguiraye	1320	1135	1215	1978
Dubréka	0	1504	787	1876
Forécariah	0	2247	1043	2187
Fria	0	21	876	1941
Gaoual	903	558	474	1576
Koubia	672	404	361	1099
Koundara	1191	213	353	2937
Labé	2559	753	781	2173
Lélouma	1975	738	584	2185
Mali	2004	1169	875	1793
Tougué	1105	564	579	1886
Total	11729	10646	9167	26269

Table 24: Details of community case management conducted by CHWs in FY 2016

Prefectures	Number of people treated with ACT Quarter 1	Number of people treated with ACT Quarter 2	Number of people treated with ACT Quarter 3	Number of people treated with ACT Quarter 4
Boffa	2125	1061	135	1468
Boké	2151	745	712	2223
Coyah	934	1097	594	947
Dinguiraye	1320	1135	1215	1978
Dubréka	1843	1685	787	1876
Forécariah	2350	2311	1043	2187
Fria	1554	1603	1469	2018
Gaoual	853	519	474	1596
Koubia	672	404	361	1099
Koundara	991	213	352	2940
Labé	2559	759	781	2173
Lélouma	1975	738	584	2185
Mali	1943	1158	875	1785
Tougué	1073	564	579	1872
Total	**22383**	**13992**	**9961**	**26347**

Training for facility-based staff

As part of improving the quality of malaria case management in the health facilities in FY 2016, *StopPalu*, in collaboration with the NMCP, conducted several trainings, refresher trainings, and on-the-job trainings targeting experienced and new health agents.

Training for facility-based staff on malaria case management. During the first quarter, to increase the number of providers trained on malaria case management in the health facilities, the project worked with the DPSs to identify and train new health providers from public and private facilities (health posts, health centers, and hospitals) in the regions of Boké, Conakry, and Labé using the revised version of the training manual and protocols. The manual integrates RDT use, case management of simple and severe malaria cases, IPT, BCC, M&E, and waste management. The trainers took the opportunity during the training sessions to share some common weaknesses found during previous supervisory visits. At the end of the training, each participant received a copy of the training manual. Each training lasted five days. A total of 231 health providers (55 in Conakry, 88 in Boké, and 88 in Labé) were trained.

Training of health providers in Boké

Group work during the training in Koundara

On-the-job training for facility-based staff. In the particular context of Guinea where the main providers of care services in the health facilities are interns and where there is poor communication between the different units within a given health facility (often with weak leadership from the heads of units), onsite training is a good way to improve quality of care. Onsite training offers opportunities to accomplish the following:

- Reach most of the health facility staff (including the interns)
- Perform some practical exercises with concrete cases
- Improve collaboration between different units (treatment and diagnosis units)
- Discuss all questions/concerns as well as some specific challenges at each facility

During the second quarter, to improve malaria case management in three CMCs in Conakry (Flamboyant, Minière, and Ratoma), and two private clinics (Sésir and Solidarité), the project conducted onsite trainings. These trainings involved all health staff members providing malaria prevention and treatment services. The training sessions presented information on the signs of simple cases and severe cases of malaria, RDT use, treatment of simple and severe cases based on the national protocols, IPTp, routine LLIN distribution, malaria reporting forms, and monthly monitoring meetings. At the end of the different presentations,

the facilitators shared the findings of previous supervision activities and recommended actions to correct the weaknesses. The NMCP Deputy Coordinator and the *StopPalu* Chief of Party attended each session to share their views about the importance of respecting and adhering to national protocols and guidelines. A total of 200 health providers benefited from the training.

Activity 2.2.1.2 Strengthen the national supportive supervision system offered by district health team staff and health center heads. During FY2016, to ensure adherence to the national malaria prevention and treatment protocols, the project supported the 14 DPSs to conduct four supervisory activities (one per quarter) and the DRSs to conduct two supervisory activities (Quarters 2 and 4). Supervisory activities covered all malaria control activities. However, during the first and second quarters, special focus was placed on adherence to case management protocols for diagnosis of cases before any malaria treatment is given, and for IPTp, ensuring that patients take their SP doses in front of the health providers. For the third and fourth quarters, the supervision visits focused on health posts, CMCs, and hospitals. The project worked with the supervisory teams at all levels to disseminate the results of the supervision visits and to follow up on the implementation of recommendations. These supervision activities helped identify health facilities that needed on-the-job training. The monthly monitoring meetings at the DPS level were good opportunities to share the results of the supervisory activities and the primary recommendations.

Activity 2. With the NMCP and other stakeholders, design and conduct activities to improve caretaker, household, and community knowledge ACT as the treatment for uncomplicated malaria; motivate/promote prompt care-seeking for fever; and improve adherence to treatment protocols.

Activity 2.2.2.1 Organize social mobilization activities at facilities and at the community level to improve caretaker, household, and community knowledge of ACT as the treatment for uncomplicated malaria. For FY 2016, based on the DPS monthly reports and the results of the KAP Survey, the project communication team organized several social mobilization activities targeting prefectures where malaria cases and deaths were the highest, as well as the prefectures where the level of knowledge on malaria was low. The project, in collaboration with the DPSs, the heads of health centers, and CHWs, organized mass outreach activities in these prefectures to achieve the following:

1. Inform the population about malaria data in their communities (cases of malaria, number of deaths)
2. Promote use of prevention and treatment products available in health facilities at no cost to patients (LLINs, SP, ACT, and RDTs)
3. Promote early care-seeking at the onset of fever (consult the CHW in the village and/ or the health post or the health center)

For the first quarter, outreach activities were organized in the prefectures of Boffa, Fria, Koubia, and Lélouma. In the fourth quarter, the project organized social mobilization activities in the prefectures of Coyah, Forécariah, Dinguiraye, Koubia, Boffa, Boké, Gaoual, and Koundara. The activities took place in the sub-prefectures that had the highest malaria incidence rates based on their health center malaria report form for the month of August 2015. It is important to mention that these activities enabled the project to mobilize the communities and discuss malaria prevention and treatment services available in their communities. It was also a good opportunity to share malaria data with the communities and their leaders, explain the danger of malaria, and understand the barriers that prevent communities from practicing healthy behaviors. To better capture the communities' attention, awareness building activities were conducted in the form of theatrical and musical

performances that conveyed key messages. At the end of each activity, question-and-answer games were played and participants who provided correct answers received gifts such as tee-shirts or caps.

Outreach activities in Dubréka

Outreach activities in Coyah

During the second and third quarters, outreach activities were organized in all 19 prefectures/communes, with an emphasis on the promotion of the LLIN mass distribution campaign.

During the reporting year the NGO facilitators conducted 2,186 group discussions and reached 30,694 people. The topics discussed during this year were mainly to promote the population's participation in the LLIN mass distribution campaign and early care-seeking (through CHWs or health facilities) in case of fever. These dialogues were good opportunities to prepare the population for the mass distribution campaign and to address some of the barriers communities face in terms of net use and health facility attendance rates.

Table 25: Number of group discussions conducted by NGO fields agents during the FY 2016

Prefectures	Number of group discussions	Number of people reached		
		Men	Women	Total
Boffa	186	1250	1376	2626
Boke	421	3292	2238	5530
Coyah	179	838	1470	2308
Dinguiraye	117	951	1257	2208
Dubreka	234	1503	1922	3425
Forécariah	381	1851	2943	4794
Fria	65	505	274	779
Gaoual	77	579	326	905
Koundara	129	742	922	1664
Koubia	41	391	530	921
Labe	92	519	901	1420
Lélouma	53	332	557	889
Mali	100	650	1050	1700
Tougué	111	558	967	1525
Total	**2186**	**13961**	**16733**	**30694**

- **Challenges and Specific Measures Used/Planned to Overcome Them**

Adherence to case management protocols in the hospitals and health posts remains a challenge. To improve health facility performance in this area, the project will work with the DPSs, DRSs, and NMCP to increase supervision and continue to reinforce the capacity of all health providers, including interns. Preventing supply shortages is also a challenge the project will continue to address with the heads of facilities, SIAPS, and the NMCP, to closely monitor consumption and avoid running out of critical commodities.

3.3 Result 3: NMCP's technical capacity to plan, design, manage, and coordinate an enhanced comprehensive malaria control program

3.3.1 Sub-result 3.1. Improved MOH capacity to collect, manage, and use malaria health information for monitoring, evaluation, and surveillance

- **General Objective**

To build MOH capacity to collect, manage, and use malaria health information for M&E and surveillance, based on the M&E manual and trainings conducted in FY 2015 as well as the revised NMCP database.

- **Specific Activities and Results**

During FY 2016, *StopPalu* conducted the following activities:

Activity 1. Support facility-based data collection.

Activity 3.1.1.1 Support monthly health facility monitoring meetings. During FY 2016, based on the results of FY 2015, *StopPalu*, in collaboration with its NGO partners, supported monthly meetings to compile and analyze data at each health center to improve the quality of the collected malaria data. During these meetings, the health facility registers are used, as well as reports from CHWs and health posts, to complete the malaria monthly report form. The reports are analyzed, and recommendations are made for the next month. These meetings involve all the health facility staff implementing malaria prevention or treatment activities, heads of health posts, two CSH members, 10 CHWs trained in malaria case management, and one NGO field agent.

Activity 3.1.1.2 Support the DPSs to organize the monthly monitoring meetings. During FY 2016, *StopPalu* continued to support the DPSs in organizing monthly meetings with the participation of all heads of health centers to review, discuss, correct, and analyze monthly malaria data before sending to the NMCP and the SNIS. For the first two quarters, a total of 114 meetings were supported. The main points discussed were the following:

- Stock-out of malaria commodities, especially in the prefectures of the regions of Boké and Labé
- The high malaria incidence rates in some facilities
- Delay in the transmission of monthly reports in some prefectures despite participation in the monthly meetings
- Discrepancies between the data reported in monthly reports and data in the primary data collection tools

During these meetings, actions were proposed to correct the problems noted during the month. For example, one reason for discrepancies between the data reported by the health centers and those in the primary tools is due to errors from the health posts. To reduce this problem, the heads of health facilities requested that all heads of health posts bring their registers to the health center during the monthly meetings, not only the report forms. In this way, the heads of health facilities can verify the data on the register before filling out the report forms. This corrective action has improved the quality of data.

To reduce supply shortages, the NMCP recommended that the health facilities' orders be sent from the DPS to the PCG on a monthly basis, not only when the DPS has received the orders from all the facilities. The fact that the DPSs wait until they receive the orders from all the facilities before sending a combined order to the PCG explains the commodity stock-outs in some facilities, since all the facilities do not have the same consumption level.

To avoid delays in the transmission of the prefecture monthly report, the project team recommended that a second person be authorized by each DPS to submit the report when the person responsible is not available for any reason.

During the third quarter, due to the different campaigns (immunization, NTDs, mass LLIN distribution) that occurred, only the three prefectures of Kindia were able to hold all their monthly meetings. The five prefectures of Boké did not hold meetings in May; the six prefectures of Labé and Dinguiraye only held a June meeting, after the mass LLIN distribution campaign; and the five communes of Conakry did not hold their meetings in April. A total of 35 meetings were supported during the third quarter. The main points discussed were the following:

- Stock-out of malaria commodities, especially in the regions of Conakry and Kindia
- The close expiration dates (June and July 2016) of the ACTs and RDTs available in facilities
- The fact that the new reporting form for malaria commodities were not available in all facilities
- The high malaria incidence rates in some facilities (Dubréka and Fria)
- Delay in the transmission of monthly reports in some prefectures despite participation in the monthly meetings

During these meetings, actions were proposed to correct the problems noted during the month. To reduce stock-outs, the DPS pharmacist asked the facilities that have extra medicine/supplies to give some to facilities that are out. The project also insisted that the NMCP pharmacy unit take the appropriate action to send the commodities to the DPSs and facilities. The project team emphasized that the facilities should make sure they are first using the commodities that are close to expiration and keeping the newer ones for later, and that all expired commodities be place somewhere that is not easily accessible.

The project team visited health facilities with high malaria incidences to try to understand the situation. In Fria for example, the team realized that there was a private health facility that was treating all fever cases as if they were malaria cases, with no confirmation, which was the reason why the Aviation Health Center reported such a high incidence. During the project and the DPS team visit to the private center, the facility confirmed its error and corrected for the following month. The project communication team also conducted social mobilization activities in these areas to promote the use of LLIN and early care-seeking at the onset of fever. To avoid delay in the transmission of the prefecture monthly report, the project team recommended that the DPSs verify the correct submission of their report before the 15th of each month.

During the fourth quarter, 57 monthly meetings were held. The main points discussed were the following:

- Stock-out of malaria commodities (RDTs), especially in the regions of Conakry
- The non-submission of reports from the two main hospitals

After the meetings, the project team informed the NMCP and SIAPS about the stock-out, and appropriate actions were taken. These meetings were also used to share the findings and recommendation from various supervision visits conducted by project team. These meetings also helped identify health centers with high incidences of malaria. For these

health centers, the project conducted some site visits to understand the reasons and take appropriate actions.

Activity 3.1.1.3 Provide trained MOH staff who are in charge of statistics with necessary equipment. Based on recommendations from the training on the M&E manual for MOH staff who are in charge of statistics, and to help prefecture-level staff members perform their tasks more effectively, during the third quarter *StopPalu* provided a laptop computer and printer to the person in charge of the statistics in each of the 19 DPSs covered by the project. This equipment will help them to enter monthly data from all the health centers working under their directorate and to send the data to NMCP and SNIS in a timely manner.

Distributing laptops in Labé

Activity 3.1.1.4 Expand information and communication technology use to collect data at the community level. During the first quarter, based on the results of the pilot for the use of RapidPro implemented in Coyah and Dubréka, *StopPalu* worked with the DPS to train 49 CHWs in Forécariah on the use of short messaging system (SMS) to collect data through the RapidPro software. During the fourth quarter, the project, in collaboration with DPSs and with UNICEF funding, trained 98 CHWs in the prefectures of Boffa and Boké. The training included two days of theoretical training and a third day for practical exercises. The trained CHWs submit their data on a weekly basis. At the end of training, each CHW received a cell phone with a solar charger provided by UNICEF. The project team, in collaboration with NGO partners' field agents, is monitoring the regular submission of the weekly data reported through SMS by the trained CHWs.

Activity 2. Increase use of data collected routinely by supervisors.

Activity 3.1.2.1 Increase the use of data collected routinely by supervisors. In addition to data collected by the routine system, *StopPalu* conducted regular supervision activities for different levels of data collection (central, regional, and prefectural, including community). These supervision sessions provided information about agents' performance through on-the-job observation and verified the quality of data collected directly through primary tools. During the months of November and December 2015, the project team supervised 43 facilities (8 in Boké, 20 in Conakry, 6 in Kindia, and 9 in Labé). The objectives of the supervision sessions were to assess the quality of malaria control activities and the quality of monthly data reported by health facilities.

In the region of Boké, the main findings were as follows:

- A few cases of fever were not tested before treatment in two out of the four health centers visited.
- The commodity management stock forms were not updated in three out of the four health centers visited.

- In three out of the four health posts visited, the staff adhered to case management protocols and all cases of fever were tested before treatment.
- The Daconta health post was out of the malaria monthly report form.
- The health posts were not referring pregnant women to health centers to receive their LLINs.
- All the facilities received small stocks of malaria commodities during the last distribution in November 2015.

In the region of Kindia, the key results were as follows:

- The IPTp protocol was not followed in the Dubréka hospital (providers were not beginning treatment at the 13th week of pregnancy as required).
- In the Dubréka hospital, all pregnant women were being treated with quinine even when they were eligible for ACT (after the first week of pregnancy).
- In the four health posts visited, several issues were noted:
  - There were some weaknesses in the RDT use (the date and time were missing on the tests).
  - The health posts did not refer severe malaria cases to health centers as required but treated them with quinine (with incorrect doses).
  - The health posts did not provide SP at the correct stage of pregnancy.
- The health post of Sory-oula was out of RDT and ACT.

The key findings in the region of Labé were as follows:

- The staff adhered to case management protocols in all the health facilities visited except for the Labé hospital and the Fafabhè health center (where a few cases of fever were not tested before treatment).
- Supervisors observed some differences in the data noted in the registers and those in the monthly report forms in the Fafabhè health center.
- SP was out of stock at the Leysarè health center.
- All the health centers visited had inadequate filing systems for monthly reports.

The main results in the region of Conakry were as follows:

- The staff adhered to case management protocols in all the health centers visited except in four (Masiré, Matoto, Adja Djene KABA, and Tombolia health centers).
- Registers of patient consultations were well maintained in all the facilities.
- Case management protocols were posted in all the facilities.
- SP was administered under the supervision of the providers.
- Some severe cases of malaria had no severe signs mentioned in the registers.

Primary Recommendations:

- Reinforce internal data verification in the health facilities.
- Continue supervision to ensure that case management protocols are adhered to, especially in the hospitals.
- Conduct refresher training on RDT use for heads of health posts.

During the second quarter, the project team also supervised 60 facilities (4 in Boffa, 13 in Boké, 15 in Conakry, 2 in Forécariah, 5 in Gaoual, 17 in Labé, and 4 in Dinguiraye). The objectives of the supervision sessions were to assess the quality of malaria control activities and the quality of monthly data reported in the health facilities.

In the region of Boké, the main findings were as follows:

- Some cases of fever were not tested because RDT was out of stock in Boffa and Boké.
- One of the five health centers visited in the prefecture of Boké was out of malaria reporting forms.
- The Sansale health center was not conducting routine LLIN distribution via EPI visits because the refrigerator had not been working since January, so they were not providing EPI services.
- Some cases of severe malaria were treated at the health post of Bantala in Gaoual.

In the region of Kindia, the key results were as follows:

- In the Forécariah hospital, the registers were not well maintained; some results of administered RDTs were not reported in the consultation registers.
- The health post of Sanoyah was out of RDT and ACT.

The key findings in the region of Labé were as follows:

- The staff adhered to case management protocols in all the health facilities visited except for the Labé hospital and the health centers of Sannou and Fafabhè (where some cases of fever were not tested before treatment).
- The signs of severe malaria were not reported in the registers in the Sannou health center and the Labé hospital.
- Supervisors observed some differences in the data noted in the registers and those in the monthly report forms in the Fafabhè health center.

The main results in the region of Conakry were as follows:

- In the Matam CMC, the case management protocols and registers are well maintained in all the units except in the emergency unit, where they continue to treat cases without testing.
- In the Minière CMC, some interns were not as knowledgeable as they need to be in the use of RDTs.
- The staff adhered to case management protocols in all the public health centers visited except three (Matoto, Tombolia, and Maciré).
- The private health facilities did not follow national protocols.
- The private facilities had a low consumption rate of commodities provided by the NMCP.
- Case management protocols were posted in all the facilities.
- SP was administered under the supervision of providers in public health facilities.

Main recommendations:

- Reinforce internal data verification in the health facilities.
- Continue supervision to ensure that case management protocols are respected, especially in the private health facilities, hospitals, and CMCs.
- Organize a meeting with the NMCP and the private facilities to discuss the issues with these facilities and develop an action plan for improvement.
- Conduct refresher training on RDT use for heads of health posts.

The findings and recommendations from these supervisions visits were shared with the DPSs/DCSs and other health facilities during the monthly monitoring meetings. The project staff also took the opportunity at these meetings to orient or correct some weaknesses noted during the supervision sessions.

Supervision visit in Conakry

Supervision visit in Dinguiraye

In the third quarter, *StopPalu* regional teams conducted supervision activities in 12 health facilities of the regions of Boké (prefectures of Boffa, Boké, Gaoual, and Koundara) and Labé (prefecture of Tougué). These supervision visits targeted health centers and hospitals to verify adherence to national guidelines. The objectives of the supervision visits were as follows:

1. Assess compliance with the national case management protocols.
2. Evaluate the administration of SP for IPTp.
3. Assess the LLIN routine distribution and outreach at health posts.
4. Evaluate the level of implementation of recommendations from previous supervision sessions.
5. Identify the main problems and propose corrective actions.

In the region of Boké, the key findings were as follows:

Strengths in the health centers:

- All the providers had been trained on malaria case management.
- The registers were well maintained.
- RDTs were well administered, and the results noted in the registers.
- Eligible pregnant women received IPTp as required by the national protocol.
- All monthly reports were available.

Areas needing improvement in the prefectural hospital of Boffa:

- The interns were not following the national protocols (they were administering drugs other than those recommended, and some cases were treated with no confirmation).
- The interns were not performing RDTs properly.
- Registers were not well maintained (all diagnosis results were not noted in the registers).
- Data quality (consistency between data in the primary tools and the monthly reports) needed improvement.
- The national malaria prevention and case management protocols were not posted in the consultation offices.
- SP was not available in the delivery room for pregnant women who needed to take it.

- Artesunate-amoadiquine (ASAQ) for adults was out of stock.

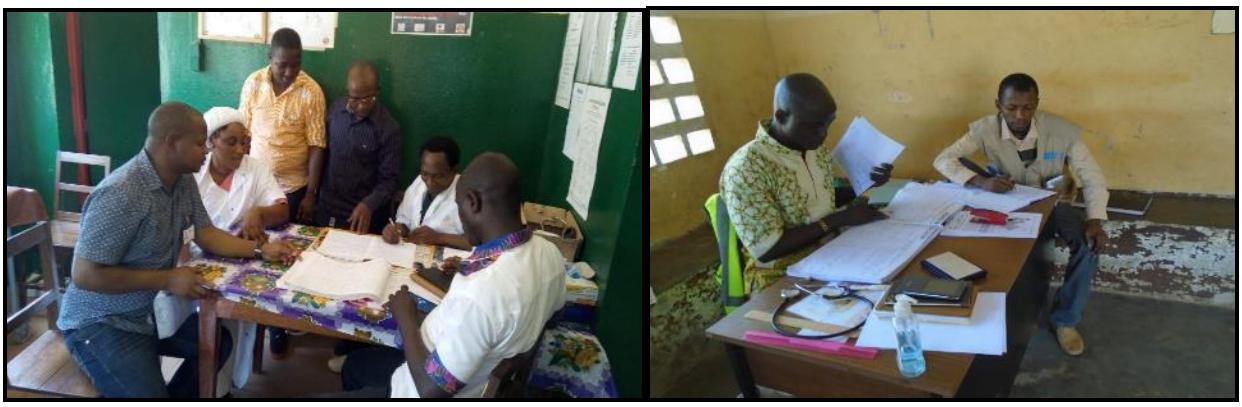
In the prefecture of Tougué, the key findings were as follows:

Strengths in the health centers:

- All the providers had been trained on malaria case management.
- RDTs were well administered.
- Eligible pregnant women received IPTp as required by the national protocol.

Areas needing improvement:

- Some weaknesses in filling out the vouchers for the LLIN routine distribution were noted.
- Some monthly reports from the CHWs and health posts were missing at the Kansangui Health Center.
- Some cases of fever were not tested in the Kansangui Health Center.



The project staff supervision at the hospital of Boffa and Gaoual

At the end of each supervision, the supervisors shared the findings with the facilities' staff members, made key recommendations, and designated a person responsible for each action. For the Boffa hospital, the project team took the following immediate actions:

- Oriented the entire staff on the malaria prevention and case management protocols during the hospital daily staff meeting.
- Posted the malaria prevention and case management protocols in all the offices.
- Provided two new registers for the emergency unit.
- Provided a box of SP in the delivery room.
- Transported the ASAQ for adults from the DPSs to the hospital pharmacy.

Project staff orienting the Boffa hospital staff members

The director of the hospital receiving new registers

During the fourth quarter, the project team supervised 58 health facilities (21 in Boké, 22 in Conakry, 6 in Kindia, and 9 in Labé). One of the objectives of these supervision visits was to verify the quality of data (consistency between the data reported and the data in health facility registers). During these supervision visits, the project team, together with health facility staff, counted the number of cases mentioned in the records—consultations, diagnosed cases, positive cases, and cases of pregnant women treated—and compared these numbers with the data in the monthly reports. The project team also verified health providers' adherence to malaria prevention and treatment protocols and the stock management. In the facilities where the project team found many new providers, they conducted on-the-job training to explain the malaria prevention and treatment protocols, RDT use, and data collection processes (the use of the malaria report form). These trainings improved the knowledge and capacity of new providers, even before they attended any formal training. Please note that during the last quarter, there have been many changes in health centers' staff, especially in the regions of Boké and Labé. It is also important to mention that the stock-out of commodities in many facilities makes it difficult to adhere to malaria treatment protocol.

During these supervision sessions, the team noticed further major improvements in the quality of services and data reported. The discrepancies between the data reported and data in the registers had continued to decrease. However, there are still issues with data from the health posts and hospitals. The main recommendations from these different supervision visits are as follows:

- Conduct refresher training for heads of health posts
- Review the health centers' supply chain
- Revise primary data collection tools

Project team and the chief of TP health post in Kouria during supervision

Project team supervising an ANC agent during consultation

Activity 4. Support the implementation of the capacity building plan for the SNIS.

Activity 3.1.4.1 Support NMCP and SNIS in revising/adapting primary data collection tools at the health facility level (ANC registers and general consultation registers). During the first quarter, the project team participated in the development of the SNIS strategic plan. In this plan, the revision of the health facility primary data collection tools is among the top priorities. During the second quarter, the project team supported the Bureau of Strategy and Development and SNIS to organize a workshop to harmonize the national health indicators. This was the first step before revising the primary data collection tools. The list of indicators was validated during the fourth quarter. The project will support the SNIS to organize the revision of data collection tools at the health facility level November 6–11 as planned by the SNIS. The project is also a member of the SNIS TWG that meets weekly at the MOH.

Activity 3.1.4.2 Train and orient facility-based staff on the use of new data collection tools. During the first quarter of FY 2016, to improve the quality of monthly reports submitted by private health facilities, *StopPalu* worked with the NMCP to train health facility staff on the malaria monthly form. During the training, the project team explained each indicator on the report form, how to calculate the indicators, where the data sources are, and how to analyze the monthly report. The training targeted the heads of private facilities and their deputies or assistants. A total of 27 staff members attended the training.

Activity 5. Support the NMCP in decentralizing its database at the regional and prefectural levels.

This activity was not implemented because the MOH and SNIS have decided to use the Demographic and Health Survey 2 (DHS2) at the national level. All the districts will implement the DHS2, which includes malaria indicators.

- **Challenges and Specific Measures Used/Planned to Overcome Them**

To improve the quality of data collected, it is important to revise the primary data collection tools. Before the implementation of this activity, it was important to have the list of health indicators developed and validated. Now that this is complete, *StopPalu* will continue to work closely with the SNIS to respect the dates of November 6–11 for the data collection tools revision workshop.

3.3.2 Sub-result 3.2. NMCP coordination capacity strengthened

- **General Objective**

To strengthen NMCP's coordination capacity, during FY 2016 *StopPalu* continued the implementation of the NMCP capacity building plan developed after the organizational self-assessment conducted by the project in FY 2014. *StopPalu* built on the FY 2015 results to conduct the following activities.

- **Specific Activities and Results**

Activity 1. Support the implementation of the NMCP's capacity building plan.

Activity 3.2.1.1 Provide NMCP with equipment and materials. In FY 2016, *StopPalu* continued to provide the NMCP with Internet connection, supported renovation of the toilets, and provided a water tank. These elements are key in maintaining a good working environment for the NMCP and its partners. In addition, the project team provided maintenance for all NMCP equipment.

Activity 3.2.1.2 Support the NMCP to create a website. During the third quarter, the project supported the NMCP to reactivate its website. The project continued to provide technical assistance to the NMCP staff in charge of the website.

Activity 3.2.1.3 Support a malariology course. This activity was postponed to December 2016 at the request of the NMCP in order to ensure the involvement of all key actors. The NMCP and the project have agreed to sign a contract with the Entomological Research Center of Cotonou (*Centre de Recherche Entomologique de Cotonou*) in Benin to conduct the training in Guinea. The plan is to hold two workshops—one for NMCP staff and key partners and the second for the DPS and DRS staff from PMI-supported prefectures and communes to increase their knowledge of malaria control.

Activity 3.2.1.4 Support NMCP in editing and disseminating the annual report, including reporting on activities conducted by all partners. As was done in FY 2015, *StopPalu* worked with the NMCP BCC and M&E staff to develop the annual report, including reporting on the activities of all partners involved in malaria control in Guinea. One thousand copies were produced and distributed.

Figure 3: NMCP 2016 annual report

Activity 2. Support the NMCP in planning, coordination, and supervision activities.

Activity 3.2.2.1 Support NMCP to conduct TWG and partners' meetings. In FY 2016, *StopPalu* continued to support NMCP in implementing and conducting various TWG meetings on malaria control. Each TWG developed an annual work plan, including all partners' activities. These meetings present an opportunity to monitor the implementation of these plans and to discuss any other issue that the partners face in the field. It is important to mention that in FY 2016, because of the LLIN mass distribution campaign, few TWG groups were held because most of the NMCP staff and partners were often in the field to implement the various campaign activities. However, the project tried to organize a meeting for each TWG at least once a quarter to assess the implementation of the action plan.

Activity 3.2.2.2 Strengthen the national RBM Committee. In FY 2016, *StopPalu* continued to support the NMCP in organizing the RBM Committee's quarterly meetings to review and validate malaria data and information. During the reporting year, three RBM meetings were held. These meetings offer an opportunity to present the malaria control activities implemented during the quarter and discuss any major issues. During the FY 2016 meetings, the participants discussed the following main points:

- The mass LLIN distribution campaign
- The issue of the high number of interns in the health facilities in Conakry
- How to increase the number of death notifications that are reported (keeping data up to date)
- Strategies to avoid commodity stock-outs
- How to improve the quality of data in health facilities

Activity 3.2.2.3 Support NMCP in developing its annual work plan. To help the NMCP plan and prioritize annual malaria control activities, from January 11 to 13, 2016, *StopPalu* and other partners participated in the development of the NMCP action plan that integrates the activities of all partners. The workshop began with the review of the 2015 report, which showed that the death rate from malaria is higher in Kankan, followed by N'Zérékoré, and that Mamou had the lowest death rate. The major findings that emerged were as follows:

- The under-reporting of deaths cases
- The high number of interns in health facilities
- Most of the paid health workers are not performing their tasks.

Recommendations:

- Report all death cases
- Have paid health workers effectively play their roles in adhering to case management protocols
- Have the DCSs/DPSs display more interest in malaria control activities

Activity 3.2.2.4 Support NMCP supervision responsibilities. During FY 2016, *StopPalu* participated in two NMCP supervision activities. The first supervision activity was conducted in March 2016 and covered the region of Conakry. In each commune, one public health center, one private health center, and a CMC were visited.

Strengths:

- Major improvement in adherence to case management protocols in the public facilities visited (the health centers of Kaporo and Coronthie, for example, had a 100% performance rating)
- The registers were well maintained, with the RDT results noted.
- SP was provided under direct supervision of a care provider.
- Bed nets were distributed according to the protocol.

Areas needing improvement:

- The private facilities were not testing all cases of fever.
- The facilities visited were using medicines other than those mentioned in the national protocols.
- Some units in the CMCs need improvement (emergency and pharmacies).

The second supervision activity took place in June 2016, and *StopPalu* participated in the prefectures of Boffa and Boké. In each prefecture, one urban health center, rural health center, and the hospital were visited.

Strengths:

- Major improvements in adherence to case management protocols in the health centers visited were noted.
- The registers were well maintained, with the RDT results noted.
- SP was provided under direct supervision of a care provider.
- Bed nets were distributed according to the protocol.

Areas needing improvement in the hospital:

- Some cases of fever were still treated as malaria with no confirmation.
- The facilities visited were using medicines other than those mentioned in the national protocols.
- The results of the diagnosis tests were not noted in the registers.
- The data reported were different from those in the primary tools.

At the end of the visit, the supervisors shared the findings with facility staff members and made some recommendations. The main problems in the hospitals were linked to staff turnover and human resource issues: there were many units and many interns. The

providers changed every week. People who were trained in one week were not there the following week. The staff members paid by the government were often absent or not performing the tasks. Some heads of units displayed the attitude that they are above the national policy and do not need to follow protocols. One of the recommendations from the supervisors was that the DPS team needs to closely supervise the hospitals. The project team will use the daily staff meetings to re-train staff members and interns.

Activity 3.2.2.5 Edit and disseminate national documents on malaria control. To reinforce the use of the NMCP's national policies, guidelines, and plans, *StopPalu* continued to support the NMCP's editing and dissemination of these documents to partners, MOH directorates (e.g., national, regional, and prefectural), private and public health facilities (e.g., hospitals and health centers), other national programs, and other stakeholders. For FY 2016, *StopPalu* edited the training manuals on malaria prevention and case management and distributed them to participants after each training. The NMCP annual report and the malaria diagnosis QA/QC manual were also edited and distributed to the MOH directorates.

Activity 3.2.3.6 Support data quality analysis activities. For FY 2016, during the supervision exercises *StopPalu* worked with the NMCP to evaluate the quality of malaria data collected in the health facilities.

Activity 3.2.3.7 Conduct LLIN monitoring. In February 2016, *StopPalu*, in collaboration with CDC, collected 60 Netprotect nets distributed though the FY 2014 campaign in the regions of Boké and Labé to conduct limited insecticidal content analysis. To implement this activity, *StopPalu* identified and trained five CHWs in each prefecture on the protocol and the questionnaire. These CHWs visited households in the selected villages to collect nets that had been hung and used (the CHWs replaced the nets they collected with another type of net). The nets collected were sent to CDC/Atlanta to test the quality of the nets two years after the distribution.

Training CHWs for the LLIN monitoring in Labé

Activity 3.2.3.8 Conduct therapeutic efficacy studies. This activity was not implemented in FY 2016 due to the delay in obtaining the report of the FY 2015 study. The Maferinyah center experienced some delays in conducting the study and providing the final report that was received in July 2016.

Activity 3. Build national capacities in entomology and vector surveillance.

Activity 3.2.3.1 Rehabilitate and reactivate sentinel sites for capture of mosquitoes. In FY 2016, *StopPalu* continued to support NMCP in rehabilitating and reactivating sentinel sites for the capture of mosquitoes and for facilitation of national entomological monitoring and surveillance. During the first quarter, *StopPalu* supported the NMCP's entomological unit to

conduct site visits in the Boké and Labé prefectures to capture mosquitoes to facilitate national entomological monitoring and surveillance. *StopPalu* helped the NMCP procure some basic field equipment for routine entomology monitoring. During the second and third quarters, the NMCP team did not conduct a visit to the sentinel sites because everyone on the NMCP vector control team was busy with the mass LLIN distribution campaign. During the fourth quarter, the NMCP's entomological unit conducted site visits in Dabola and Faranh.

- **Challenges and Specific Measures Used/Planned to Overcome Them**

Some of the activities under this sub results were not implemented because of the mass LLIN distribution activities. For example, the number of sentinels' sites visits planned could not be reached due to the fact that all the NMCP vector control units staffs were busy with the campaign activities. To overcome this challenge, the project will recruit an entomologist on FY 2016. This person will work with the NMCP team to implement the planned activities.

3.4 Project Management

During FY 2016, project management activities focused on the submission of project deliverables, procurement, and partnerships. These activities are briefly described below.

Activity 3.2.1. Project deliverables

During FY 2016, the project submitted quarterly reports and a one-year extension proposal and budget. The USAID/Guinea Office of Financial Management performed a financial review at the *StopPalu* office in Conakry in February 2015 and a second review was conducted in the Conakry and Labé offices in September 2016.

Activity 3.2.2. Procurement

During FY 2016, the project procurement activities focused mainly on the LLIN mass distribution materials. For the second quarter, the project produced 44,113 distribution vouchers, 13,979 tee-shirts, 4,919 caps, 4,919 bags, and 620 banners for the enumeration activities in the 14 prefectures. For the third quarter, the project produced 5,300 books of vouchers, 6,100 tee-shirts, 2,300 caps, and 278 banners for the enumeration activities in Conakry and the distribution in the 19 prefectures/communes. To allow the CHWs to perform their activities during the rainy season, the project procured and distributed 1,400 boots, 1,400 raincoats, and 1,400 flashlights. The project also procured and distributed 650 bicycles for CHWs.

3.5 Partnership

Collaboration with national NGOs

During the second quarter of FY 2016, with UNICEF funding, the project awarded grants to five national NGOs to support community activities in the 14 prefectures. These NGOs, recruited 58 field agents who were then trained by *StopPalu*. The main tasks of these agents included the following:

- Providing work materials and data collection tools to CHWs on a regular basis.
- Conducting supervision of the 1,310 project-trained CHWs and monitoring the implementation of their activities (home visits).
- Supporting the heads of 131 health centers to hold monthly meetings and prepare monthly reports.
- Organizing awareness-raising activities at health centers and in the community that focus on the fight against malaria.

These field agents increased BCC activities at the community level, improved data collection, and also improved CHW performance through close supervision. During the third and fourth quarters of FY 2016, the NGO field agents were able to conduct 2186 group discussions and reach 30,694 people.

Collaboration with UNICEF

During the first quarter of FY 2016, the project signed a new agreement with UNICEF to support IMNCI activities at the community level. The activities included the following:

- Training and refresher training for 1,310 CHWs on IMNCI
- Training for 630 CHWs on SMS use for data collection with the RapidPro software
- Provision of data collection tools and primary equipment for CHWs
- Supervision activities

3.6 Other Activities

3.6.1 Support the NMCP to organize the midterm review of the NMS (2013–2017) (external review).

During the first quarter, the NMCP and partners, with WHO technical support via an international and a national consultant, conducted an evaluation of malaria control interventions at the health facility level (hospitals, health centers, health posts) and the community level.

Methodology

In each health region, one hospital, one health center, and one health post were selected. Technical teams went to the field to collect data from the 2013–2015 time period. Information on the following topics was collected:

- Planning and financing the fight against malaria
- Standards in human resources and technical guidelines
- Management of malaria data
- Advocacy, communication, and social mobilization
- Use of IPT for pregnant women
- Patients' access and malaria diagnosis coverage
- Patients' access and malaria treatment coverage
- Evaluation of the quality of case management in the health facilities
- Malaria burden

Individual interviews with providers of prevention services and case management as well as with DPSs were carried out. This external phase of the midterm review allowed the NMCP and its partners to confirm or refute the results of the self-assessment of NMCP performance. After the evaluators finished the field work, a two-day workshop was organized to compile the results. The teams of evaluators from each region, the NMCP team, and the two consultants (national and international) participated in that workshop. The two consultants wrote the final report of the review that was released in the second quarter of FY 2016.

3.6.2 Visit of PMI/Washington and CDC leadership in Guinea

During the month of December 2015, a team of representatives from PMI/Washington and CDC/Atlanta visited the country to meet with various stakeholders in the fight against

malaria, to review progress in project implementation, identify challenges, and propose solutions.

During the visit, the mission had several working sessions, including the following:

- Meeting with the implementing agencies: During the meeting, *StopPalu* and SIAPS presented their annual report in terms of achievements, key performance indicators, and challenges. Their presentation included an overview of several issues, including the impact of the Ebola outbreak on malaria diagnostic and treatment services.
- Meeting with NMCP staff and the implementing agencies: During the meeting, the NMCP staff members who lead the NMCP TWG groups presented the composition of each group, the 2016 planned activities, the key results, and the challenges. The participants discussed each presentation and made recommendations on how to solve the issues presented.
- Visit to the insectary and laboratory facility at the University of Conakry (*L'Université Gamal Abdel Nasser de Conakry)*: During the visit, the head of the NMCP's Vector Control Unit presented the different offices and work areas of the insectary and the laboratory. He also presented information on the equipment that has been procured by the project. He mentioned that the insectary will be functional after the insect housing and breeding facility are set up.
- Visits to one public and one private health center in Conakry: These visits allowed the PMI and CDC representatives to see first-hand the malaria control activities that are supported by the US Government/PMI through its implementing agencies. The visits also enabled the representatives to participate in a dialogue with beneficiary communities, and helped them to understand the particular characteristics of some private facilities. During these visits, the representatives observed activities that highlighted routine LLIN distribution, malaria diagnosis and case management, and the impact of the Ebola outbreak on malaria activities.

The PMI team meeting with staff from NMCP and implementing agencies

The PMI team visiting the insectary facility

3.6.3 Train NMCP staff on the use of mapping software

During the month of December 2015, the project supported the training of six NMCP M&E staff members on the use of the Map Info software. This software was installed on the NMCP data manager's computer.

3.6.4 Train and orient WHO supervisors in Boké on basic concepts and protocols in the NMS

As part of the collaboration between the Health District of Boké and *StopPalu*, the Health District requested that *StopPalu* orient the WHO field supervisor on the NMS. The training/orientation would aim to support and inform WHO field supervisors who are monitoring the number of deaths in the health facilities and at the community level. WHO conducts many supervision activities and sometimes gives inaccurate recommendations to the health facilities. To avoid this situation, it is important that these supervisors have adequate information on the NMS and malaria protocols.

On October 29, 2015 the project's regional team in Boké conducted an orientation session for 15 WHO field supervisors from the prefecture of Boké (conducted at the Kassopo health center).

The project team presented the following themes:

1. General information on malaria
2. The key elements of the NMS
3. Prevention, diagnosis, and case management protocols
4. Mains points to check during the supervision visits in the health facilities

During the presentation, the supervisors noticed that they did not have accurate information regarding malaria control activities. They were providing incorrect recommendations to the health providers during their supervision visits. The various topics listed above were presented, followed by discussions, questions, and answers. At the end of the presentation, the participants requested that the project team organize a similar training for their colleagues in other regions.

Orientation of WHO field supervisors in Boké

Orientation of WHO field supervisors in Coyah on malaria control

During the second quarter, the project's regional team in Forécariah conducted an orientation session for 58 WHO field supervisors from the prefecture of Coyah (13), Dubréka (21), and Forécariah (24).

3.6.5 Train CHWs in IMNCI

During the second quarter of FY 2016, *StopPalu*, with UNICEF funding, supported the IMNCI program to train 72 new CHWs.

Specific objectives:

At the end of the training, CHWs should be able to carry out the following activities:

- Identify the signs and symptoms of the diseases and conditions (malaria, pneumonia, diarrhea, and malnutrition).
- Use RDT to diagnose malaria cases.
- Properly use data collection tools (protocols, stock cards, order sheets, reporting forms).
- Ensure adequate treatment of infants at the community level.
- Advise the mother and family on disease prevention and home care.
- Order drugs and other commodities.
- Submit monthly reports to health centers.

The training methodology was very participative, and trainers used local languages to ensure that the participants understood the content presented. The project also conducted a refresher training for 75 CHWs on IMNCI, including RDT use for malaria diagnosis. With the end of the Ebola outbreak, all the CHWs must begin using RDTs again. The refresher training also offered participants an opportunity to review all the weaknesses noted during supervision visits, especially correctly filling out the patient registers. The trainers emphasized the importance of data quality. During the third quarter, *StopPalu*, with funding from UNICEF, supported the IMNCI program to train 468 new CHWs in the regions of Boké and Labé.

CHW training on IMNCI at Lélouma

During th eight months of activities following the training, these CHWs treated 29,100 children: 19,377 for malaria, 5,295 for pneumonia, 3,438 for diarrhea, and 990 for malnutrition.

3.6.6 Visit of PMI/Guinea team to Labé

June 1–5, a team of representatives from PMI/Guinea and *StopPalu* visited Labé to supervise malaria control activities, especially the LLIN mass distribution campaign. During the visit, the mission had several working sessions, including the following:

Meeting with health authorities: The first day of the visit, the team met the DRS, the DPS, and their colleagues. The team explained the objectives of the mission and thanked them for their availability and support. The DRS and DPS, in the names of their colleagues, welcomed the visitors and thanked PMI and USAID for all their contributions to improvement of the health system in Labé. They also explained the process of the campaign, from micro-planning to distribution. They explained that they were currently conducting the post-distribution visits to promote proper and regular use of LLINs. They stated that the overall process went very well and all the authorities, even the governors and prefects, and communities were involved in each step of the process. This was the key for success. They stated that the project regional team is part of the regional health team, and they are very supportive. They project team respects the leadership of the health authorities. All the activities are coordinated and supervised by the regional authorities.

Meeting with regional and prefecture representatives: After the DRS meeting, the team visited the Secretary General of the region and the Secretary General of the prefecture. Both authorities expressed their satisfaction with PMI and project support. As representatives of the communities, they stated that they were particularly happy with the work the CHWs are doing in the villages now with project support. The fact that CHWs can test and treat malaria cases is really appreciated by the population. They also said all the communities have received their nets. They advocated for motorbikes for CHWs to facilitate their transportation. They said that bicycles are good, but difficult to use in the bad road conditions, especially in the region of Labé where there are so many mountains. The team also thanked the officials and asked them to ensure that people are regularly and correctly using the bed nets.

Visit to villages: After visiting the authorities, the project visited the sub-prefectures of Popodra, Nadhel, and Djonfo. During the two-day visit, the team met several CHWs and visited more than 30 households. It is important to mention that in each village, the visitors followed the social mobilization team to visit the houses and verify whether the nets were available and hung. In all these villages, all the households had received their nets; most of them had hung them, and for those who had not, the team and the agents assisted them. One important thing we noticed was the fact that in these 30 households with at least two nets per house, we saw only two nets that were used in the rectangular form. All the rest were transformed into a circular form. We also saw how easily the community members were able to transform the nets. The visitors participated in dialogues with beneficiary community members, which helped them better understand the communities' feelings about project activities.

Daily monitoring meeting: On June 4, the team participated in the distribution campaign's daily monitoring meeting at the DRS. During the meeting, each facilitator and head of the health center presented data from their health center, with the number of households visited, number of nets hung by families, number of nets hung by mobilization agents, and number of people reached. At the end of the meeting, recommendations were made to solve the problems raised by the teams in the field.

Visits to the health center of Djonfo: Next, the team visited the health center of Djonfo, where we met the health facility staff and the 10 project-trained CHWs that implement malaria control activities around that center. During the visit, the team observed activities that highlighted routine LLIN distribution, malaria diagnosis and case management, and the reporting system in the health center. The team members viewed the health center's consultation registers and monthly reports as well as reports from the health posts and CHWs.

3.6.7 Participation at the RBM annual Communication Community of Practice (CCoP) conference

On September 2016, the NMCP communication officer and *StopPalu* team attended the RBM annual CCoP conference in Dakar. The main objectives of the conference were as follows:

1. Develop a CCoP Network of the RBM partnership and expand the role of social behavior change and communication (SBCC) in the implementation of the prevention, control, and elimination activities of Malaria
2. Understand SBCC through technical presentations, discussions, exchange of ideas, and good practices
3. Identify and develop activities for CCoP and the working groups for 2017
4. Move forward in the implementation of the Strategic Framework on the RBM partnership's CCoP, dedicated to communication on malaria at the national level
5. Discuss the changes to bring to the CCoP mandates and approve them
6. Discuss the updates to be made to the Communication Indicators Reference Guide on SBCC of RBM's CCoP for communication on malaria.

The activities of the conferences included presentations, group work, and open discussions. Some countries presented innovative approaches they have piloted and projects they are planning to implement. This conference was a great opportunity to present successful initiatives through training materials and discussions, to share experiences, and to allow other countries to learn from previous experiences. The conference was also an opportunity for representatives of different countries to highlight the results already achieved and discuss challenges faced. The conference helped the participants to be part of the RBM CCoP Network and have access to several sources of communication materials and tools.

3.7 M&E

Activities described in the preceding sections have contributed toward achievement of project performance indicators. Achieved results described by indicators are attached to this document (see ***Annex A***). Indicator data were collected by *StopPalu* M&E staff, technical staff, and partner NGO staff responsible for implementing project activities.

In FY 2016, the project activities focused on the LLIN mass distribution campaign, training of CHWs and health facility-based staff, and BCC; therefore, a significant amount of data for project performance indicators linked to these activities were collected. To minimize errors during collection, project technical staff, and national partner NGO field agents were trained on how to collect this data, and they received the appropriate tools. In accordance with the M&E plan approved by USAID, collection was conducted in all 14 prefectures and Conakry.

Annex A. Performance Report for FY 2016

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
OVERALL PMI SUPPORT							
Indicator 1: All-cause mortality rate among children under five years old (U5)	122 deaths / 1,000 live births (Source: DHS 2012)	NA	NA	NA	NA	TBD	This indicator will be collected through MIS 2016
Result 1: IMPROVED MALARIA PREVENTION IN SUPPORT OF THE NMS							
Result 1.1: Supply and use of LLINs increased							
Indicator 1.1.a: % households with at least one LLIN **(PMI Required Indicator)**	84,2% CAP 2015	NA	NA	NA	NA	90%	This indicator will be collected through MICS-MIS 2016
Indicator 1.1.b: % pregnant women who slept under an LLIN the previous night (**PMI Required Indicator)**	71,5% CAP 2015	NA	NA	NA	NA	85%	This indicator will be collected through MIS 2016.
Indicator 1.1.c: % children U5 who slept under an LLIN the previous night **(PMI Required Indicator)**	70,4% CAP 2015	NA	NA	NA	NA	85%	This indicator will be collected through MIS 2016.
Indicator 1.1.d: Number of LLINs purchased by USG funds that were distributed though campaign in PMI regions	1353825	NA	NA	1000000	NA	NA	During the reporting quarter, the project distributed 1000.000 LLINs procured by PMI.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 1.1.e: Number of LLINs purchased by USG funds that were distributed though routine distribution in PMI regions	167896	55412	50955	31861	46242		During the reporting period, 46242 LLINs were distributed in the health centers through ANC and EPI services in the 4 regions and the prefecture of Dinguiraye supported by PMI: Boké 12327, Kindia 6421, Labé 12445 Conakry 12597 and Dinguiraye 2452
Indicator 1.1.f: Number of LLINs purchased by other donors that were distributed with USG funds though campaign in PMI regions	1,282,000	NA	0	2370567	NA	NA	
Indicator 1.1.g: Number of persons trained in LLIN distribution, micro-planning, enumeration, distribution, hang-up and or promotion	14736 (983 women)	0	2013 (235 women)	12599 (3076 women)	NA		
Result 1.2: Intermittent preventive treatment in pregnancy (IPTp) uptake increased							
Indicator 1.2.a: % women who received two or more doses of sulphadoxine-pyrimethamine (SP) during their last pregnancy within the last two years in intervention areas **(PMI Required Indicator)**	17.8% (EDSG-MICS IV-2012)	NA	NA	NA	NA	85%	This indicator will be collected through MIS 2016.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 1.2.b: # health workers trained in intermittent preventive treatment in pregnancy (IPTp) with USG funds *Data are disaggregated by gender and paid public health workers/community volunteer health agents.* **(USAID Guinea Mission Indicator 3.1.3.4-1)**	1,403 (539 women)	0	200	0	453	661	**A** total of 453 persons, including 269 women, have received training on IPC of malaria in pregnant women. Health officials are divided as follows: Boké 110 (67 women) Conakry 31 (31 women) Kindia 102 (65 women) Labé 210 (106 women)
RESULT 2: DIAGNOSTIC TESTING AND MALARIA TREATMENT CAPACITY IMPROVED							
Result 2.1: Diagnostic capacity and use of diagnostic testing improved							
Indicator 2.1.a: % health centers with the ability to perform diagnostic testing for malaria (microscopy and/or rapid diagnostic testing) **(PMI Required Indicator)** *Numerator: health centers with ability to perform diagnostic testing for malaria; Denominator: health centers in intervention area*	100% (152health centers/152)	NA	NA	NA	NA	95%	During FY 2014, all 152 health centers were trained on malaria diagnosis using rapid diagnostic tests.
Indicator 2.1.b: % community health workers capable of using rapid diagnostic tests (RDTs) at household level **(PMI Required Indicator)** *Numerator: CHWs capable of using RDTs at household level, Denominator: CHWs in intervention area*	75,27% (986 trained CHWs of 1310)	79.47 % (1,041/1,310)	105% (1376/1310)	NA	NA	95%	This indicator was completed during the second quarter.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 2.1.c: % diagnostic tests (microscopy and/or RDTs) interpreted correctly (positive–negative) **(PMI Required Indicator)**	96% microscope tests interpreted correctly according to Improving Malaria Diagnosis Project (IMaD)	0	0	0	0	70%	This indicator will be collected next year because the slides bank is now available at the NMCP.
Indicator 2.1.d: # health workers trained in malaria diagnostics with USG funds *Data are disaggregated by gender and paid public health workers/community volunteer health agents.* (**USAID/Guinea Indicator 3.1.3.1-5)**	124 individuals trained on microscopy and RDTs by IMaD (nationwide) 2218 538 women)	347(121 women): 229 (94) paid public heath , 63 (22) private heath and 55 (5) CHW	535(189 women)190(116) paid public heath,10(7) private heath and 335 (66) CHW	41(12women)	735 (117 women) 42(11) public heath and 693 (106) CHW	Microscopy 60 RDT 1596 Health facility 286 CHWs 1310	During the quarter, the project trained a total of 735 persons, including 117 women.
Result 2.2: Case management of uncomplicated and severe malaria improved							
Indicator 2.2.a: % patients (all ages) who tested positive (via microscopy or RDT) and who received an effective anti-malarial as reported by health facilities. **(PMI Required Indicator)**	According to NMCP baseline is low but official data unavailable	97,79%(1326 80/135684)	98,37%(602 00/61200	98,75% (60898/6166 6)	99,31% (148424/1 49456)	60%	During the reporting period, in the 14 prefectures and 5 communes of Conakry (project coverage area), 149456 people tested positive for malaria; among those, 148424 received an effective anti-malarial. Please note that these data are collected by health facilities.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 2.2.b: % patients with suspected malaria referred for a diagnostic test (microscopy or RDT) **(PMI Required Indicator)**	N/A	94,37%(199064/210941)	92,71% (117631/126882)	97,90% (133062/137966)	99,21% (248673/250649)	80%	During the reporting period, in the 14 prefectures and 5 communes of Conakry (project coverage area), there were 250649 suspected malaria cases; among those, 248673 received malaria tests. Please note that these data are collected by health facilities.
Indicator 2.2.c: % patients with a negative diagnostic test who received treatment for malaria **(PMI Required Indicator)**	N/A	1,67% (1056/63380)	1,09% (615/56431)	0,05% (34/73396)	0,14% (137/99217)	< 10%	During the reporting period, in the 14 prefectures and 5 communes of Conakry (project coverage area), 99217 patients had a negative diagnosis test; among those 137 received treatment for malaria.
Indicator 2.2.d: % health workers nationwide with malaria-related responsibilities that received at least one supervision every three months **(PMI Required Indicator)** *Numerator: health workers in intervention area receiving at least one supervision visit every three months, Denominator: health workers in intervention area*	62,42%	46,43%(482/1038)	45,66% (474/1038)	6,36%(66/1038)	56,35% (585/1038)	85%	During the reporting period, 585 health agents were supervised in PMI area. The project regional team supervised health workers in the regions as follows: Boké183 (122 women), Conakry 60, Kindia 17 (8 women), and Labé 325(181 women

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 2.2.e: % of children under 5 with fever in the last 2 weeks who received treatment with ACTs within 24 hours of onset of fever (**PMI Required Indicator)**	1.4% (EDSG-MICS IV-2012)	NA	NA	NA	NA	90%	This indicator will be collected through MIS 2016.
Indicator 2.2.f: # health workers trained in case management with ACTs with USG funds **(USAID Guinea Mission Indicator 3.1.3.1-1)** *Data are disaggregated by gender and paid public health workers/community volunteer ents.*	1,675 (347 women)	286(101 women): 186 (82) paid public heath , 45 (14) private heath and 55(5) CHW	536(189 women)190(116) paid public heath,10(7) private heath and 335 (66) CHW	0	1143(375 women)45 3(269)paid pubic heath and 693(106) CHW	1536 Health facility 226 CHW 1310	**A** total of 1143 people, including 375 women, have received training on case management.
RESULT 3: NMCP's TECHNICAL CAPACITY TO PLAN, DESIGN, MANAGE, AND COORDINATE A COMPREHENSIVE MALARIA CONTROL PROGRAM ENHANCED							
Result 3.1: MOH capacity to collect, manage, and use malaria health information for M&E and surveillance improved							
Indicator 3.1.a: Comprehensive malaria M&E plan developed and implemented as an integral part of the new National Malaria Strategic Plan **(PMI Required Indicator)**	A national M&E plan for malaria is not in place	NA	NA	NA	NA	NA	This was completed during FY 2014.
Indicator 3.1.b: Number of NMCP/SNIS staff trained in data quality, management and data analysis with at least 75% score during post-test.		0	0	0	0	15	This was completed during FY 2014.
Indicator 3.1.c: Number of health Information officers at regional and prefectural levels trained in data quality, management and data analysis with at least 75% score during post-test.		0	0	0	0	23	This was completed during FY 2014.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator 3.1.d % of health facilities submitting timely and complete reports according to national guidelines	30% (Source: NMCP records in 2012) 69.86%	71%	61%	70%	67%	75%	Among the 179 health facilities (health centers and hospitals) that submit their monthly report to the DPS/DCS, 67% submitted complete reports on time during the reporting quarter. However, note that 100% of the health facilities submitted their report by the 15th of the month.
Indicator 3.1.e: number of sites where entomological monitoring and insecticide resistance testing conducted	N/A	2	0	0	2	4	During the last quarter, the NMCP team conducted the entomological monitoring in the sites of Dabola and Faranah.
RESULT 3.2: The NMCP coordination capacity strengthened							
Indicator 3.2.a: Assessment/organizational audit of NMCP conducted **(PMI Required Indicator)**		NA	0	0	0	NA	This was completed during FY 2014.
Indicator 3.2.b: Recommendations of assessment/organizational audit of NMCP implemented **(PMI Required Indicator)**	9	1	0	0	2	100%	During the last quarter, the project provided the NMCP with a water tank and renovated the toilets.
Indicator 3.2.c: # quarterly coordination meetings under NMCP's leadership held with meeting minutes distributed **(PMI Required Indicator)**	6	1	1	1	1	4	During the reporting period, the project supported the NMCP conduct the quarterly meeting of the RBM Committee.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
GOVERNANCE INDICATORS							
Indicator G.a: % of citizens surveyed in targeted project areas who report a favorable opinion of the performance of their local health center in the area of malaria prevention and control in the past year *Data are disaggregated by gender, geographic locale, and age.*	73% was reached under *Faison Ensemble* for health generally, but information for malaria specifically is unavailable, 86,4% CAP 2015	NA	NA	NA	NA	85%	
Indicator G.b: # health centers that publicly post the price of their services and products	100					130	This indicator will be completed next year when the NGOs will sign the grants.
Indicator G.c: # citizen-led public meetings or other forums for citizens to engage local or regional government officials on malaria-related policies, performance, or services in the last reporting period *Data are not disaggregated.*	27	0	0	0		10	This indicator will be completed next year when the NGOs will sign the grants.
Indicator G.d: # members of local NGOs that have received training in monitoring the use of public services in malaria-related services and advocacy with project support in the last reporting period. *Data are disaggregated by gender.*	264(34 individuals trained through Faisons Ensemble 125,105)	24(11)	32(5 women)	0	0	50	This indicator was completed during the second quarter.

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
BCC INDICATORS							
Indicator BCC.a: # targeted public health providers trained in BCC techniques in malaria prevention and control *Data are disaggregated by gender and by paid public health providers and community volunteer health agents.*	661 1,732 1860	286 (101 women): 186 (82) paid public heath , 45 (14) private heath and 55 (5) CHWs	535 (189 women) 190 (116) paid public heath,10 (7) private heath and 335 (66) CHWs	0	1143 (375 women) 453 (269)paid pubic heath and 693 (106) CHWs	1422	During this quarter, the project trained a total of 1143 public health workers including 375 in BCC techniques.
Indicator BCC.b: # people from NGOs sub-grantees and CBOs trained in BCC techniques in malaria prevention and control *Data are disaggregated by gender and regions*	64 (9 women) 134(22 Women)	79(19 women)	70(16 women)	663(101 women)	173 (28 women)	50	During that quarter, 173 including 28 women (NGO and CBOs members) were given training on malaria prevention.
Indicator BCC.c: # people reached by NGOs and CHWs with BCC malaria prevention and control activities *Data are disaggregated by gender and by region*	1,525,298 (580,716 women) 957427(514244 women)	351585(196494)	213527(123835 women)	344639(194906 women)	487677(277502 women)	943200	During this quarter, 487677 people (277502 women) were reached by BCC activities during the home visits conducted by CHWs and group discussions conducted by NGO agents. The regional breakdown is: Boké 155729 (85560 women) Kindia 89247 (50527women) Labé 242701 (141415 women).
Indicator BCC.d: % of people who recall hearing or seeing a specific malaria message	57,7% CAP 2015	NA	NA	NA	NA	55%	

Indicator	Baseline (or RTI achievement through *Faisons Ensemble* if applicable)	FY16-Q1 *Actual*	FY16-Q2 *Actual*	FY16-Q3 *Actual*	FY16-Q4 *Actual*	FY16 *Annual Target*	*Notes*
Indicator BCC: # BCC products produced and disseminated with project support during the reporting period *Data are disaggregated by media type.*	2 new spots (radio and TV) produced for the distribution campaign in Conakry. These spots + existing spots broadcast 1,436 times (radio) and 138 times (TV). 2 roundtables produced and broadcast 10 times. 5 interactive programs produced and broadcast 25 times. 3,555 t-shirts, 1,500 posters and 260 banners also produced and distributed.	*1363 radio/television spots 738 in Conakry and Kindia,336 in Labé and 289 in Boké; 11 Roundtable; 13 interactive program and 335 chansons.*	*912 radio/ Television spots 432 in Conakry and 144 Kindia, 336 in Labé. For the mass distribution activity in the 14 prefectures, the project produced and distributed* 13,979 tee-shirts, 4,919 caps, 4,919 bags, and 620 banners.	6365 radio/TV/ spots and adver tisement *For the mass distribution activity 20579 tee-shirts 7219 caps 3000 posters 21 media (radio and TV) coverage 4919 bags 54 caravanes de sensibilisation 2000 story boards 898 Banners 24 ineractives programs and 16 round tables*	3861 radio/ television spots 1428 in Conakry,864 in Boke,705 in Kindia and 864 in Labe *11 roundtable 10 interactive program, 8 mass activities and 117 songs*		During the reporting period, the project broadcast 3861 radio/TV spots, 10 interactive programs, 8 mass communication activities, 117 songs, and produced 11 roundtables.